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Instructional Supervision

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Instructional Supervision

This report presents a summary of my work with UNO/ESSP in accordance with the three main objectives:

1. to develop a training program and conduct workshops in the development and use of learning styles as a part of the instructional process;
2. to empower a select group of Afghans with the essential supervisory techniques and knowledge necessary for developing a supervisory framework which will assist in improving the primary school classroom teacher, with a major focus on supervising and improving classroom instruction;
3. to develop a model for determining the effectiveness of implementation of UNO/ESSP materials developed for primary schools (textbooks, teaching guides, teaching aids, and learning materials).

The report is organized according to the listed objectives. Within each section, the process of development will be described, products will be explained, and recommendations/next steps offered.

Two training manuals were completed and are attached in Appendix A (Learning Styles Training Manual) and Appendix B (Supervisory Handbook). As part of the development process for the two manuals, seven workshops were conducted involving approximately 100 UNO/ESSP personnel. Workshops were conducted for men and women master teacher trainers. Two specialist facilitators, Zalmei Sherzad and Jalat Khan Hekmaty, were involved in the development and pilot testing of materials.

Throughout my work at UNO/ESSP, gender equity has been an important concern, both in the development process and in the resulting products. A summary of gender-related activities and products is included for each of the objectives.

Lynn Evans

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- A. Learning Styles Instructional Workshop
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LEARNING STYLES INSTRUCTIONAL WORKSHOPS

(Section I)

The objective was to develop a training program and conduct workshops in the development of learning styles as a part of the instructional process.

Workshops were conducted for the following UNO/ESSP groups:

- | | |
|--------|--|
| No. 1: | 2 to 6 May 1993/Peshawar
Female Master Teacher Trainers |
| No. 2: | 9 to 11 May 1993/Quetta
Female Master Teacher Trainers |
| No. 3: | 12 May 1993/Peshawar
UNO Staff (overview) |
| No. 4: | 17,18,20 May 1993/Peshawar
Male Master Teacher Trainers |
| No. 5: | 19 May 1993/Peshawar
UNO Staff (overview) |

This report provides an overview of the key ideas of the 4MAT model, describes the training provided to UNO/ESSP personnel, and offers recommendations for revisions in the training model for classroom teachers. Recommendations for delivery and implementation are also included.

4MAT (4 Most Appropriate Teaching Techniques)

Since the 4MAT model is an integral part of the overall curriculum development effort of the UNO/ESSP project, an awareness level workshop in learning styles using the 4MAT model was provided for 25 female master teacher trainers and 7 literacy teachers in Peshawar, 9 female master teacher trainers in Quetta, and 6 male master teacher trainers in Peshawar.

Objectives for the workshop were to (1) increase awareness of different students' learning styles, (2) prepare master teacher trainers to plan units and assist teachers in planning units that address the needs of students with different learning styles, (3) encourage the use of a variety of teaching methods and learning tasks to meet students' needs, and (4) increase the level of student involvement in learning activities through use of the 4MAT cycle.

The basis for this workshop was Bernice McCarthy's 4MAT model, including workshop materials for the introduction to learning styles and right/left brain hemispheric processing. According to McCarthy (1992), major premises of the 4MAT model include the following:

1. Human beings perceive and process information and experience in different ways, resulting in unique learning styles.
2. There are four major learning styles. All are equally valuable, and all learners are treated equitably as teaching accommodates the four styles.
3. Type 1 learners seek personal relevance. Teachers need to create a reason for learning that relates to the self. Type 2 learners are interested in facts and the development of concepts. Teachers need to provide information to deepen students' understanding. Type 3 learners want to know how things work. Teachers need to let them try things out. Type 4 learners are interested in self discovery. Teachers need to let them teach themselves and share their learning with others.
4. All learners need to be taught in all four ways. In this way, all will learn more easily part of the time and will learn to adapt for part of the time.
5. The 4MAT model involves a natural learning cycle, with teaching in all four modes.
6. Each of the four learning styles consists of learners who are either left or right brain dominant. Both left and right mode processing techniques need to be used so that students can learn more easily half of the time and learn to adapt the other half of the time.
7. By developing learning activities to address the four learning styles and both left and right mode processing skills, learners will come to know and use their own strengths while respecting differences of others.

The workshop series for the female master teacher trainers consisted of 10 hours of training in the 4MAT model. Subsequently, overviews of the 4MAT model were provided to UNO staff in four 1-1/2 hour sessions. Workshops for male master teacher trainers consisted of 10 hours of training in 4MAT, with feedback solicited about the feasibility of including the 4MAT training in work with classroom teachers. Suggestions for adapting the workshop for classroom teachers were incorporated into the final draft of the 4MAT training manual.

The 4MAT workshop was developed in such a way that the workshop activities included a variety of teaching and learning activities designed to meet the needs of participants with different learning styles and left/right brain preferences. Participants completed an inventory to determine their own preferred learning style and right/left mode preference and analyzed the results, then extended the analysis of their own learning style to that of a significant other,

through group discussion. Next the concepts of learning style were developed through lecture and discussion using UNO cloth charts and 4MAT handouts. Practice was then provided through question/answer reviews and by analyzing characteristics of different type learners. Participants worked in groups and used the UNO Social Studies Scope and Sequence and their knowledge of learning styles and right/left mode preferences to develop an outline of a unit plan using the 4MAT model. These initial outlines were then expanded into unit plans addressing each of the eight steps in 4MAT. Plans were translated, reviewed, revised, and shared with the entire group.

Copies of workshop handouts in both English and Dari are included in Appendix A, and copies of the inventories are included in Appendix B. Materials were adapted from Bernice McCarthy (1992), The 4MAT System Awareness Workshop Materials, Part A: Introduction to Learning Styles and Part B: Introduction to Right/Left Processing and the 4MAT Model. In addition, charts developed by the UNO/ESSP/IMDC were used in the workshop. A copy of the final draft of the awareness level 4MAT training manual is attached.

Recommendations:

Based on the workshops conducted with UNO/ESSP staff, the following recommendations are offered:

1. For classroom teachers, the awareness level training in learning styles needs to be expanded to one week in order to provide more background information.
2. A second-phase workshop could be offered to teachers with a higher level of understanding in which units could be prepared using the 4MAT model.
3. The 4MAT workshop manual needs to be translated into Dari and Pashtu. Specialist facilitators familiar with the technical vocabulary related to 4MAT could be called upon to complete this task.
4. Master teacher trainers who participated in the 4MAT training recommended a more simplified version of the workshop for teachers. They indicated that they could make modifications to simplify the introductory workshop after the manual is translated.
5. If a simplified lesson plan would be appropriate, then Madeline Hunter's lesson cycle should be considered. The 4MAT plan can be "mapped on" to the Madeline Hunter lesson cycle quite easily, as follows:

Type I Learner

Anticipatory Set
(motivating introduction, objectives,
connections with past learning)

Type 2 Learner

Input
(development of concepts)

Type 3 Learner

Guided Practice
(student practice with teacher monitoring)

Type 4 Learner

Independent Practice
(extension to new learning contexts)

Throughout the Madeline Hunter lesson cycle, the teacher checks for understanding and makes adaptations in the lesson as necessary. This corresponds to the assessment strategy of each phase of the 4MAT model.

Use of the Madeline Hunter lesson cycle would reduce the number of steps in the plan from eight (in 4MAT) to four. By using a variety of teaching methods and learning tasks, including left and right mode strategies, the needs of different students could be met without having to differentiate eight steps in each lesson.

6. Provide additional training for master teacher trainers in unit and lesson planning, including writing goals and objectives and describing activities (teaching methods and learning tasks), aids and materials, and evaluation procedures. Master teacher trainers also need to be familiar with a variety of options for informally assessing students' learning during the lesson (checking for understanding).
7. A delivery system needs to be designed so that training provided to/developed by specialist facilitator can be provided to/refined by master teacher trainers and ultimately provided to headmasters, head teachers and classroom teachers. This delivery system, a key to implementation at the classroom level, needs to involve both training and follow up activities and needs to involve school-level instructional leaders as well as classroom teachers.
8. Further, school-level leaders must be prepared for their roles as instructional leaders so that they can coordinate follow up activities and support for implementation at the classroom level. A supervisory handbook and training for their roles as instructional leaders is a beginning. School-level instructional leaders also need to be provided the specific training which classroom teachers receive so that they can support and facilitate implementation of the changes. In addition, as part of their training, this group needs specific ways that they can provide follow up activities and support for implementation on an on-going basis.
9. If a simplified version of the 4MAT model is adopted as described in (5) above, training could be provided at all levels in the following sequence:
 - (a) Learning styles awareness (4MAT)
 - (b) Madeline Hunter lesson planning

- (c) Using the Madeline Hunter model for planning lessons (a simpler format than 4MAT), incorporate a variety of activities to meet different learning styles and right/left brain preferences.
- 10. A standardized unit and lesson plan format needs to be developed so that a lesson/unit bank can be developed to compliment the UNO/LSSP scope and sequence for each subject. Training in the use of the unit and lesson plan format needs to be provided using a trainer of trainers approach for specialists, master teacher trainers, and headmasters, head teachers, and teachers.

A suggested format for lesson and unit plans is attached. Underlined headings indicate parts of the lesson. Other phrases indicate what is to be included in each section.

References

McCarthy, Bernice The 4MAT System: Awareness Workshop Materials. Excel, Inc. 1992

LESSON PLAN

Subject:

School:

Teacher:

Topic:

Grade:

Date:

Anticipatory Set

Objectives (Referenced to Unit Goals by Number)

Motivating Introductory Activity

Connect with Past Learning/Check for Understanding

Input/Modeling

List Activities (Teaching Methods/Learning Tasks) and Describe

Reference to Objectives by Number

Check for Understanding

Guided Practice

List Activities (Teaching Methods/Learning Tasks) and Describe

Reference to Objectives by Number

Check for Understanding

Independent Practice

List Activities and Describe (Include Home Learning)

Reference to Objectives by Number)

Check for Understanding

Teaching Aids/Learning Materials

Formal Assessment Procedures

UNIT PLAN

Subject:

School:

Teacher:

Topic:

Grade:

Dates:

Unit Goals and Objectives

Content Overview

Content map or outline

Activities (Teaching Methods and Learning Tasks)

Teaching Aids/Learning Materials

Evaluation Procedures

Formative Evaluation (Checking for Understanding/Continuous Assessment)

Summative Evaluation (End of Unit)

How will evaluation results be communicated to students and parents?

SUPERVISION HANDBOOK DEVELOPMENT

(Section II)

This report describes the development of a handbook for instructional supervision. The objective was to empower a select group of Afghans with the essential supervision techniques and knowledge necessary for developing a supervisory framework which will assist in improving the primary school classroom teacher, with a major focus on supervising and improving classroom instruction.

Workshops were conducted for the following UNO/ESSP groups:

- | | |
|--------|--|
| No. 1: | 23-27 May 1993/Peshawar
Male Master Teacher Trainers |
| No. 2: | 13-15 June 1993/Peshawar
Female Master Teacher Trainers |

Supervisory Handbook Development Process

The development process consisted of several phases. First, an initial draft of a supervisory handbook was compiled based on effective teaching behaviors identified by research and summarized in reports by Howard Faber, UNO/ESSP consultant in effective teaching. Indicators of these effective teaching behaviors were selected and adapted from a number of teacher observation/teacher evaluation instruments used in Louisiana, Texas, Tennessee, Connecticut, Virginia, South Carolina, and Florida, to operationalize the effective teaching behaviors identified. Supervisory techniques such as observing classes and conferencing with teachers were included to provide specific techniques for working with teachers.

Using this initial draft of a supervisory handbook, six UNO/ESSP male master teacher trainers and two specialist facilitators participated in a five day workshop where indicators of effective teaching and supervisory techniques were presented. This group was asked to contribute input related to the initial draft of the handbook, to ensure that the document would be contextually relevant to Afghan schools. Two specialist facilitators, Jalal Khan Hekmaty and Zalmei Sherzad, served as translators for the workshops and also contributed important ideas to the supervisory handbook. Revisions in the initial draft were made based on the input of this group.

A second group of Afghan educators, eighteen UNO/ESSP female master teacher trainers, participated in a three day workshop to provide some general supervision training and to gain the input related to the development of the handbook. At the conclusion of this workshop, revisions will be made once again. The handbook will then be ready for field testing with headmasters and head teachers in a sample of schools.

Purpose/Overview

The supervisory handbook was designed for use by headmasters and head teachers in working with classroom teachers to improve learning outcomes for students. It was designed as a guide for headmasters and head teachers in their roles as instructional leaders, not as a prescription. It includes a set of key ideas or common themes, information about components and indicators of quality teaching and learning, and suggestions for using information gained from classroom observations in conferences with teachers.

Throughout the handbook, emphasis is placed on working with teachers to improve learning outcomes for students. The supervisory role is viewed as one of working with teachers as a facilitator, not as an inspector. While this may represent a shift from traditional views of the role of the supervisor, it is an important distinction if teachers are to work collaboratively with headmasters and head teachers as instructional leaders, so that all parties focus on improved learning outcomes for children.

Content and Structure of the Handbook

The handbook consists of five sections. The first four sections consist of indicators of quality teaching and learning. The 35 indicators operationalize the dimensions of quality teaching and learning and utilization: I) Preparation and Planning; II) Classroom Management; III) Learning Equity; and IV) Effective Teaching. The dimension of Preparation and Planning consists of four components, Individual Differences, Teaching Aids and Learning Materials, Homework (Home learning), and Assessments. The dimension of Classroom Management is further broken down into components of Monitoring and Maintaining Student Behavior, Class Structure (Task Orientation), and Student Engagement. Learning Equity includes Equity for All Students and Interpersonal Relationships. The dimension of Effective Teaching consists of the components of Clarity of Presentation, Use of a Variety of Teaching Methods and Learning Tasks, Use of Teaching Aids and Materials, Enthusiasm, and Feedback.

The last section of the handbook includes information related to observing classes, taking notes, and conference skills. The supervisor who observes classes using the indicators in the handbook leaves the classroom with a great deal of information which can be used in working with teachers to emphasize strengths and improve teaching and learning for students. The last section provides techniques for the supervisor for using this information in working with teachers.

Recommendations/Next Steps

1. The revised version of the handbook needs to be field tested using a sample of headmasters and head teachers in Afghan schools. As part of this field testing, participants need to be trained in the use of the handbook, particularly in relation to the use of the indicators in observing classes and in conferencing with teachers.
2. After training and again after using the handbook in observing and conferencing with teachers, feedback needs to be solicited from headmasters and headteachers about the applicability and usefulness of contents of the handbook in working with teachers. Input also needs to be solicited on the quality of the training program to use the manual. Based on results, revisions in the handbook and the training to use the handbook need to be made.
3. A delivery system needs to be identified and training provided in the use of the handbook. Two specialist facilitators, Zalmei Sherzad and Jalat Khan Hekmaty, are knowledgeable about the supervisory handbook contents and have participated in the training of master teacher trainers. They could train other specialist facilitators and Yusuf; this group could then train master teacher trainers. Master teacher trainers could then conduct workshops for headmasters and head teachers. Headmasters could be provided the materials and training to conduct inservice workshops to introduce teachers to the indicators of effective teaching and the observation/conference process.
4. This version of the handbook relates to classroom instruction, i.e., working with individual teachers to improve learning for students. Another section of the handbook could be developed for schoolwide instructional management. This handbook could guide headmasters and head teachers in inservice training related to creating effective schools. Topics could include school learning climate, use of assessment data for school improvement, parent support and involvement, school discipline plans, reinforcing achievement, etc.
5. The handbook was constructed as a tool to help teachers to improve classroom instruction, not as an evaluation instrument. However, in the future, indicators of teaching and learning quality and utilization in the handbook can be examined as a starting point in the development of teacher evaluation materials.
6. Sherzad and Hekmaty should conduct a workshop for ECA members to provide an overview of the supervisory handbook. The purpose of the handbook, the key ideas or common themes that run throughout the handbook, and the structure and content of the handbook are important concerns. After the workshop, input from ECA members needs to be solicited.
7. The supervisory handbook could also be used in the literacy program. In this case, Abdali should participate in the training provided by Sherzad and Hekmaty.

RESEARCH STUDY

(Section III)

Objective

To develop a model for determining the effectiveness of implementation of UNO/ESSP instructional materials produced for primary schools (textbooks, teaching guides, teaching aids, and learning materials)

Questions

1. Are the training programs preparing teachers/principals for their roles in implementation of new practices and materials?
2. What problems are classroom teachers experiencing in implementing new materials?
3. What supports (interventions) would teachers like/need in implementing new practices and materials?
4. Are teachers' concerns progressing over time from awareness/information concerns to concerns for impact (student learning, collaboration with others, etc.)?
5. Are teachers' levels of use of the new practices and materials progressing over time from non-use/orientation to integration/refinement?
6. Are teachers using the new practices and materials in the ways they were intended by the developers?

Methods

1. Semi-structured interviews and written evaluations at the training site with a sample of (a) classroom teachers, (b) master teacher trainers, and (c) specialist facilitators
2. Using the indicators in the Supervisory Handbook, observe and interview a sample of classroom teachers. This is for the purpose of evaluating the training program, not individual teachers. Create a sample profile for individual teachers and a group profile for training program evaluation.
3. Concerns-Based Adoption Model (CBAM) Instruments
 - (a) Define specifically the innovation under consideration and administer the

Stages of Concern Questionnaire (SoCQ) to a sample of teachers.

- (b) Interview a sample of teachers about their use of a specified innovation using the structured interview questions, Levels of Use (LoU).
- (c) Specialist facilitators and master teacher trainers determine critical elements of a specified innovation and compare to what is observed in classes in (2) above. Innovation Configurations compares the intended innovation to what is actually implemented in classrooms.

Uses

- 1. Incorporate findings into revisions in training programs, materials, manuals.
- 2. Provide appropriate interventions (support) to assist teachers in implementing innovations
- 3. Train specialists, master teacher trainers, principals in change facilitation and the role of the change facilitator, specifically using the findings of the study (what kind of help is needed and how to provide it.)

First Steps

- 1. Workshop for research staff on implementation of innovations--Stages of Concern and Innovation Configurations and the role of the change facilitator
- 2. Research staff involved in the study read Taking Charge of Change, ASCD publication by Hord, Rutherford, Huling-Austin & Hall
- 3. Translate SoC instrument and administer to a sample of teachers (Innovation=instructional aids/materials)(No training)
- 4. Define the Innovation Configuration for the use of new instructional aids/materials
- 5. Develop a simple interview for Innovation Configurations and train interviewers to use
- 6. Train female master teacher trainers in the use of the Supervisory Handbook, to prepare them to observe classes for indicators of the use of instructional aids/materials

First Steps--Week of June 20-24, 1993

1. A research team has been identified and includes the following ECA and UNO/ESSP staff members: Omar Stana, Director of Curriculum, ECA, Team Leader; Dost Mohammad, member of Curriculum Department, ECA; Zalmei Sherzad and Jalat Khan Hekmaty, Specialist Facilitators/ESSP; Mustaen Billa, Research and Planning/ESSP (background in educational administration); and Mohammad Yusuf Jabarkhil, Coordinator of Master Teacher Trainers/ESSP. Advisors to the research team include Haji Abdul Shukcor, Acting Director ECA; Gerald R. Boardman, Team Leader/ESSP; General Ayub Assil, Director of Monitoring/Research/Literacy/ESSP and Professor Wali Rahimi, Coordinator of Research and Planning/ESSP.
2. A workshop in the implementation of innovations, including Stages of Concern and Innovation Configurations and the role of the change facilitator, was conducted in English for the research team. Sherzad and Hekmaty will conduct a similar workshop in Dari for the interview team and non-English speakers as soon as they translate the necessary materials.
3. Members of the research team and advisors were provided copies of chapters related to Stages of Concern and Innovation Configurations in Taking Charge of Change. The chapters were discussed as part of the workshop for the research team.
4. Sherzad and Hekmaty will translate the Stages of Concern instrument, substituting "ECA instructional materials" for the word "innovation" to make the instrument specific to the task. Participants' names will be omitted from the form, and the district name, school name, subject and grade level will be added.
5. No training is necessary to administer the questionnaire for teachers. Teachers will be asked to cooperate and will complete a paper-pencil questionnaire. Teachers will be told that the questionnaires are anonymous and that the purpose is to look at overall concerns related to the use of ECA instructional materials, not concerns of individual teachers. The ECA interviewers will distribute and collect the instruments.
6. An Innovation Configuration and accompanying interview questions were developed for ECA instructional materials by Evans, with input from the research team. A copy is included in Appendix C. Sherzad and Hekmaty have been trained to use the interview process and will train ECA interviewers.
7. Mustaen will score the Stages of Concern Questionnaires. Mustaen has a copy of the scoring manual, and Evans met with Mustaen to discuss the hand scoring procedures. Instructions for computer scoring are also included in the manual. Mustaen will obtain group scores and create profiles to show overall implementation and by subgroup (district, school, subject, grade) but not individual scores for teachers.

Mustaen will also compile results of the Innovation Configurations interviews using percentages for the overall group and for subgroups.

Sample profiles for Stages of Concern data and Innovation Configurations data are included in Appendix C.

8. A pilot study using the Stages of Concern Questionnaire and the Innovation Configurations interview will be conducted in one ECA Winter vacation school this summer, identified by the ECA. The purpose of this pilot will be to learn the process and "try out" the instruments using a cooperative ECA school which has been active for 2-3 years. Sherzad and Hekmaty will train an ECA interview team in the interview process for Innovation Configurations. Following the initial pilot study using one school, three to five ECA schools will be selected for an extended pilot study.
9. In fall 1993 a pilot study will be conducted with a sample of girls' schools in Peshawar using female interviewers. Later this same model can be extended to a larger sample of schools and home schools in the literacy program.
10. As part of the pilot study and extended pilot study, classes will be observed by male and female master teacher trainers who have been trained in the use of the Supervisory Handbook using indicators IV.B.1, IV.B.2, IV.C.1, IV.C.2 (teaching methods, learning tasks, teaching aids, learning materials). Six male master teacher trainers and Yusuf have been trained. Sherzad and Hekmaty will review the indicators and the process with this group (including Yusuf) and coordinate the data collection process for the male master teacher trainers. Yusuf will then work with the female master teacher trainers on the same tasks.
11. Mustaen Billa of the research and planning office will be responsible for compiling the results of the studies. Following the preparation of the results, discussion and feedback will be provided to ECA relative to improving the implementation of the instructional materials in the schools.

GENDER EQUITY

(Section IV)

In working toward each of the objectives of my work at UNO/ESSP, gender equity has been one of the primary concerns, both in the development process and in the resulting products. A summary of gender-related activities and products is included for each objective.

Objective 1: To develop a training program and conduct workshops in the development and use of learning styles as a part of the instructional process

Female master teacher trainers participated in workshops in the use of learning styles as part of the instructional process and provided valuable input in the development of a learning styles training manual. Twenty-five female master teacher trainers and seven literacy teachers in Peshawar and nine female master teacher trainers in Quetta participated in workshops.

Training in learning styles is grounded in the belief that all students can learn and that teachers need to be aware of and provide for differences in the ways students learn. Sensitivity to these individual differences is important in providing for equity in learning for all students, as teachers learn to value differences and use a variety of teaching methods and learning tasks to meet students' needs. A copy of the Learning Styles Training Manual is included in Appendix A.

Objective 2: To empower a select group of Afghans with the essential supervisory techniques and knowledge necessary for developing a supervisory framework which will assist in improving the primary school classroom teacher, with a major focus on supervising and improving classroom instruction

Eighteen female master teacher trainers also participated in a supervision workshop to provide some general supervision training and to provide input into the development of a supervision handbook for headmasters and head teachers. The supervisory handbook was designed as a guide for headmasters and head teachers in working with classroom teachers to improve learning outcomes for students. It includes a set of key ideas or common themes, information about components and indicators of quality teaching and learning, and suggestions for using information gained from classroom observations in conferences with teachers.

The handbook consists of five sections. The first four sections consist of indicators of quality teaching and learning. The 35 indicators operationalize the dimensions of quality teaching and learning and utilization: I) Preparation and Planning; II) Classroom Management; III) Learning Equity; and IV) Effective Teaching. The dimension of Learning Equity consists of two components, Equity for All Students and Interpersonal Relationships. The last section includes information related to working with teachers to implement effective teaching behaviors and improve learning outcomes for students. A copy of the Supervisory Handbook is included in Appendix B.

Objective 3: To develop a model for determining the effectiveness of implementation of UNO/ESSP materials developed for primary schools (textbooks, teaching guides, teaching aids, and learning materials)

Plans have been made for a research study to determine the effectiveness of implementation of ECA instructional materials in a sample of primary schools. As part of the data collection process, female master teacher trainers who participated in the supervision workshop will observe classes for indicators related to the use of instructional aids and materials and teaching methods and learning tasks. They will also be trained, through a trainer of trainers model, to interview teachers related to their use of the instructional materials. In this way, girls' schools will be involved in the study, providing a more representative sample, and female master teacher trainers will gain practice in the use of the supervisory handbook and interview techniques to assess the effectiveness of implementation.

Appendix A

Learning Styles Instructional Workshop

Training Manual

Learning Styles Instructional Workshop

Training Manual

An awareness level workshop in 4MAT, adapted from
work by Bernice McCarthy for UNO/ESSP master teacher trainers

Dr. Lynn Evans

9 June 1993

Learning Styles Workshop Overview

This is an awareness level workshop in 4MAT (4 Most Appropriate Teaching Techniques), developed by Bernice McCarthy. It was conducted with UNO/ESSP master teacher trainers in a three-day workshop. For classroom teachers, the awareness level training in learning styles needs to be expanded to one week in order to provide more background information. Subsequently, second phase workshop could be offered to teachers with a higher level of understanding in which units could be prepare using the 4MAT model.

The 4MAT model is an integral component of the UNO/ESSP curriculum in the primary grades and provides a structured format for planning lessons and units of work to accommodate a variety of student learning styles. In the past, traditional methods of teaching have met the needs of some students; however, use of the 4MAT system enables teachers to plan lessons and units of work that better meet the needs of all students.

Key Ideas

According to McCarthy (1992), major premises of the 4MAT model include the following:

- A. Human beings perceive and process information and experience in different ways, resulting in unique learning styles.
- B. There are four major learning styles. All are equally valuable, and all learners are treated equitably as teaching accommodates the four styles.
- C. Type 1 learners seek personal relevance. Teachers need to create a reason for learning that relates to the self.

Type 2 learners are interested in facts and the development of concepts. Teachers need to provide information to deepen students' understanding.

Type 3 learners want to know how things work. Teachers need to let them try things out and practice what they have learned.

Type 4 learners are interested in self-discovery. Teachers need to let them teach themselves and share their learning with others.
- D. All learners need to be taught in all four ways. In this way, all will learn more easily part of the time and will learn to adapt for part of the time.
- E. The 4MAT model involves a natural learning cycle, with teaching in all four modes.
- F. Each of the four learning styles consists of learners who are either left or right

brain dominant. Both left and right mode processing techniques need to be used so that students can learn more easily half of the time and learn to adapt the other half of the time.

- G. By developing learning activities to address the four learning styles and both left and right mode processing skills, learners will come to know and use their own strengths while respecting the strengths of others.

Objectives

As a result of participating in this workshop, participants will:

1. increase awareness of different students' learning styles;
2. plan lessons that address needs of students with different learning styles; and
3. use a variety of teaching methods and learning tasks to meet students' needs.

Materials

white board or chalkboard
markers or chalk
pencils
UNO/ESSP scope and sequence (any subject)

Handouts (in order):

- #1 The Cycle of Learning
- #2 Learning Style Type Grid
- #3 Circle Graph--Imaginative, Analytic, Common Sense and Dynamic Learners
- #4 Written Descriptions of Type 1, 2, 3 and 4 Learners
- #5 Scoring Sheet for Right/Left Brain Inventory
- #6 Brain Hemispheres
- #7 Flower/Parts of a Flower
- #8 Left/Right Brain Characteristics
- #9 Right Brain Teaching Techniques
- #10 4MAT Model Overview
- #11 Sample Lesson Plan (Circle)
- #12 Forms for 4MAT Unit Plan

Inventories:

Learning Styles Inventory
Hemispheric Mode Indicator (Right/Left Brain Inventory)

Cloth Charts (in order):

- #1 Circle Graph--Imaginative, Analytic, Common Sense and Dynamic Learners
- #2 Brain Hemispheres
- #3 Flower and Parts
- #4 Right Brain Teaching Techniques
- #5 The 4MAT Model: An Overview

Workshop Agenda

Day 1 (3 hours)

Introductions & Ice breakers

Rationale for Using 4MAT

Learning Style Inventory

Characteristics of the 4 Learning Styles

Summary

Day 2 (3 hours)

Right/Left Brain Preferences

Right/Left Brain Inventory

Characteristics of Right/Left Brain Preference Learners

Teaching Techniques for Right/Left Brain Preference Learners

4MAT Model Overview

Learning Styles & Right/Left Brain Preference Learners

Day 3 (4 hours)

Using 4MAT to Write Unit Plans (Group Activity)

Sharing Unit Plans

Follow up

Instructions for Workshop Leaders

Day 1 (3 hours)

Introductions--Ice Breaker

Have participants interview each other in pairs and find out things to tell the group, such as:

How many children?

Where are you from?

Favorite food? Favorite color?

Allow 5 minutes.

Participants introduce each other. Workshop leaders introduce themselves or each other and provide similar information.

Introduction to 4MAT

Everyone has their own learning style. The 4MAT system has four different learning styles represented.

Most schools were taught by teachers using only one learning style. We know from research that there are at least four learning styles.

Maybe you remember from school that some students couldn't learn. Maybe the teacher thought the child wasn't very smart. Often the child was of normal intelligence but she wasn't taught in her learning style, so that it was easier to learn.

Even though we learn differently, most of you in this room have learned to adapt to the teacher's teaching style, even if it was different from your learning style. You survived and learned, but many children didn't learn, and they quit school.

In this workshop you'll learn about your own learning style and about how your students learn, and you'll learn how to plan lessons that will help all of your students learn better.

Learning Style Inventory

Now let's find out about your own learning style. We are going to complete an inventory. There are no right or wrong answers. The questions are to help you think about how you learn, so you will probably have different answers from other people in the class. That's okay, because we learn differently. Please write your name and listen to the directions.

Read directions orally.

Do the sample orally and check for understanding of directions:

SAMPLE: When I learn I am happy? fast? logical? careful?
Which is most like you? Put a 4.
Of the remaining choices, which is most like you? Put a 3.
Of the remaining choices, which is most like you? Put a 2.
Which is least like you? Put a 1.

Check responses with several participants until directions are clear.

Remember that there are no right answers or wrong answers. All answers are correct. It's about you and your own learning style. It will be all right when we're finished.

Be sure participants are working alone. Check to see that directions are understood by walking around and observing.

Allow approximately 15 minutes, or until all are finished.

Scoring the Inventory

To score the inventory:

Add the numbers in each column.

Put an example on the board:

<u>3</u>	<u>1</u>	<u>2</u>	<u>4</u>
<u>4</u>	<u>2</u>	<u>3</u>	<u>1</u>
↓	↓	↓	↓
<u>41</u>	<u>19</u>	<u>24</u>	<u>36</u>
TOTAL (Example only)			

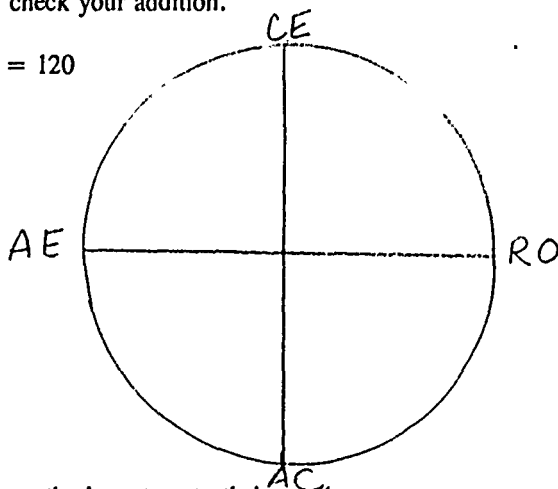
Be sure participants are totaling the numbers in each column.

All column totals should total 120. If not, check your addition.

EXAMPLE: $41 + 19 + 24 + 36 = 120$

HANDOUT #1--The Cycle of Learning

Draw a graph on the board as shown:

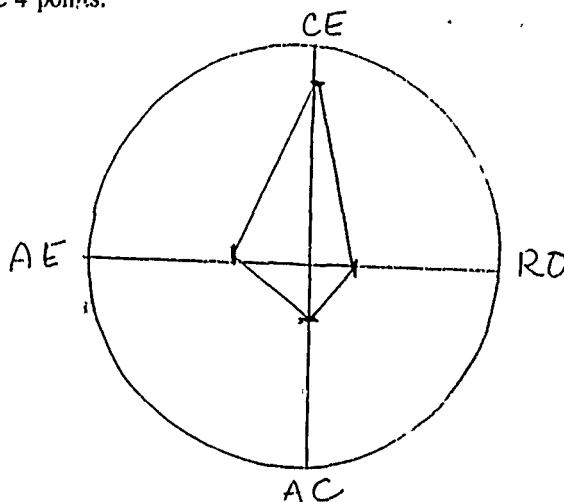


Show participants how to transfer scores from the inventory to their graphs:

- Find the number for AE and mark on the line.
- Find the number for AC and mark on the line.
- Find the number for RO and mark on the line.
- Find the number for CE and mark on the line.

Check to be sure participants have marked their graphs correctly.

Draw straight lines to connect the 4 points.



Look at each other's. You will notice that they are all different. No one looks exactly alike. That's good. That's because we all have different learning styles. Everyone's pattern is correct for him. That's very important because we all learn differently. That's why we're learning about the 4MAT system--So that we can teach in different ways and use a variety of teaching techniques that help all children learn.

HANDOUT #2--Learning Style Type Grid

Now subtract column 1 from column 3, or $AC - CE$.

And subtract column 2 from column 4, or $AE - RO$.

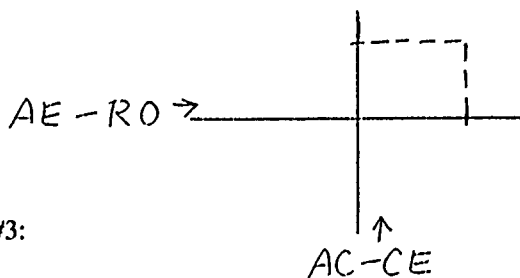
The answer may be a positive or a negative number.

Check participants' calculations.

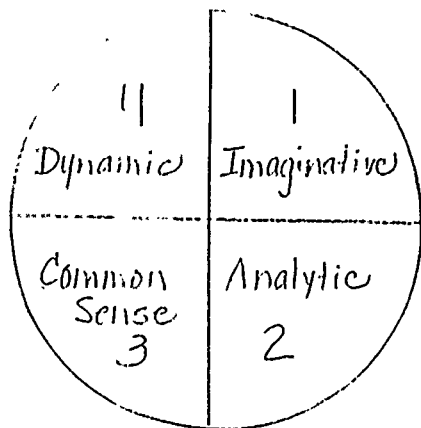
Find $AE - RO$ on the number line and make a mark.

Find $AC - CE$ on the number line and make a mark.

Demonstrate on the board how to connect the 2 points to make a square:



CLOTH CHART #1 and HANDOUT #3:



If your square is in the first quarter, you are an imaginative learner (Type 1).

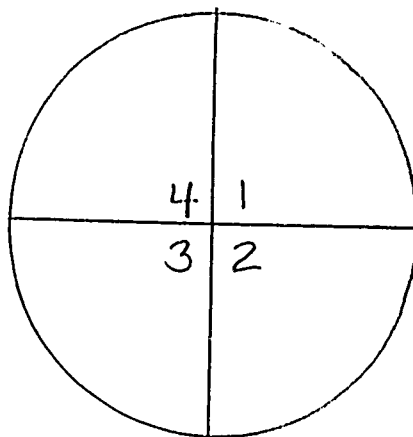
If your square is in the second quarter, you are an analytic learner (Type 2).

If your square is in the third quarter, you are a common sense learner (Type 3).

If your square is in the fourth quarter, you are a dynamic learner (Type 4).

All of you are good learners. Your learning styles are just different. In a few minutes we'll learn what it means to be a Type 1, 2, 3, or 4 learner. Right now let's see who our Type 1, 2, 3, and 4 learners are.

Draw a circle graph as shown on the board:



Type 1 learners come up and write your name in the first quadrant.

Type 2 learners write your name in the second quadrant, and so on.

Group participants according to Type 1, 2, 3, or 4.

For the next activity, move your chairs and sit with people who are the same type as you.

HANDOUT #4--Type 1, 2, 3, 4 Learners

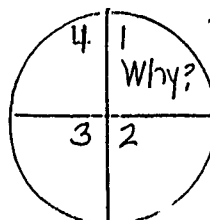
Let participants read handout.

Ask participants to listen as you highlight characteristics of each type of learner and think about whether that describes them. Do you agree? disagree? If you are not in the right group, it is possible to change groups.

Refer to cloth chart above and participants' names on board in discussing each of the four types.

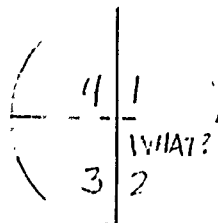
Type 1 learners want to know why what they are learning is important to them. They learn best by listening and sharing ideas. They need to be personally involved in learning. They are thoughtful people who enjoy observing others. They like discussions, group work, and realistic feedback about feelings. Type 1 learners like to be involved in important issues, and they like harmony. Their favorite question is **WHY?**

Write WHY? in the first quadrant.



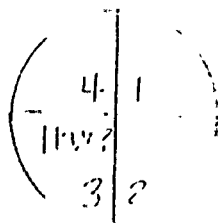
Type 2 learners want to know facts. They need to know what the experts think. They need details. They enjoy traditional classrooms, and they are more interested in ideas than in people. They are interested in transmitting knowledge. They like facts and details, are very organized, and like to do things in steps--1,2,3. They like to think things through. Their favorite question is WHAT?

Write WHAT? in the second quadrant.



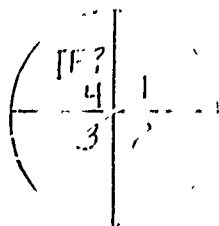
Type 3 learners want to know how things work. They like to try things out and solve problems. They don't like to be given the answers by the teacher. They would rather experiment and find out for themselves. They need to know how things work. As children, if they are given a new toy, they may take it apart to find out how it works. Type 3 learners like practical applications and hands-on activities. When you bring a flower into class and take it apart to examine it, that's hands-on learning. That's very important for a Type 3 learner. Their favorite question is HOW? (HOW DOES THIS WORK?)

Write HOW? in the third quadrant.



Type 4 learners need to know what can be done with things. They learn by trial and error. They like self discovery. They are enthusiastic about new things, and they like change. Type 4 learners are flexible, and they are risk takers. They like variety in teaching methods. Type 4 learners like action and getting things done. They like to use what they've learned in new ways. Their favorite question is IF? (IF I know this, what can I do with it to make it different?)

Write IF? in the fourth quadrant.



Questions to review:

Are any of these learning styles better than any other? (No)

Do you feel that you are in the right quadrant? Why or why not? (If not, move name on board and have participant move to sit with the new group.)

Which groups like to be the most active when they learn? (3 & 4)

Which groups like to listen and reflect? (1 & 2)

What is the favorite question for group 1? 2? 3? 4?

Group Activity

Choose a person who is important to you, such as your husband or a child. Think about the characteristics we talked about for Type 1, 2, 3 and 4 learners. Which type do you think this person is? Why? Discuss with your group. Share a few examples with the entire class.

Summary/Next Steps

You now know your own learning style. It helps us as teachers and as students to understand how we learn and how others learn. We all have different learning styles.

Teachers can use 4MAT to plan lessons that meet the needs of all learners. The teacher who knows about the four learning styles can plan lessons that have phases, beginning with quadrant 1 and proceeding around the circle. In each phase, activities will be geared to the needs of learners of that type; they will learn more easily in this phase. During the other parts of the lesson these learners will need to adapt to other styles. Students need to learn to adapt also because they will become better learners.

We will not divide children into groups according to their learning styles and teach them differently, but rather we will teach the whole class in phases. Sometimes students will work in groups, but students with different learning styles should be grouped together so that they can help each other and learn from each other.

In the next session we'll find out even more about ourselves as learners.

Day 2 (3 hours)

Last time we talked about different ways that we learn, or different learning styles. Today we'll learn more about how we learn. We know from research on the brain that the brain has two sides, and the two sides work differently. We all use both sides when we learn, but we prefer to learn and learn more easily using one hemisphere or the other. We'll learn more about left and right brain preferences later. Right now we'll complete an inventory to see which side we prefer.

Inventory

We'll do an inventory to help you discover if you prefer to learn using your left or right brain. Neither one is better than the other; they're just different. Afterwards we'll talk about what it means to you as a learner.

Directions for inventory are printed on the form, but it is important to review and demonstrate how to mark the answer form.

Be sure you complete both sides of the inventory.

To mark your answer:

There are 4 squares. Mark only one in each row.

Demonstrate on the board:

Which is more like you, column A or B?

Is it a lot like you, or somewhat like you?

Mark only one space in each row.

<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Allow approximately 15 minutes to complete the inventory.

Scoring--HANDOUT #5

Using the scoring key, circle the corresponding number in each row.

$$\textcircled{+2} +1 -1 -2$$

$$+2 +1 \textcircled{-1} -2$$

$$-2 \textcircled{-1} +1 +2$$

Add all the negative numbers.

Total + = _____

Add all the positive numbers.

Total - = _____

Find the difference.

Difference = _____

Mark your score on the number line on the top of your score sheet.

Horseshoe Activity

Give participants a slip of paper and ask them to write their final number on it. Then have them stand up and form a semi circle (horseshoe) with 0 at the center and all negative numbers on one side, in increasing order, and all positive numbers on the other side, in increasing order.

Questions

How many of you ended up with a negative number?

That means you prefer to learn using your left brain.

How many of you ended up with a positive number?

You prefer to use your right brain in learning.

How many of you ended up with zero? Or a number between -8 and +8?

You are what we call whole brained--You can learn equally well using right or left-brain learning activities. We all use both sides, but people with a right-brain preference learn best with certain kinds of activities and people with a left brain preference learn best with certain

other types of activities.

CLOTH CHART #2 and HANDOUT #6--Brain Hemispheres

Let's look at how the two sides of the brain learn:

The left side of the brain uses abstract symbols, like words and numbers. It breaks things down to analyze the parts. And it operates in a very logical, step-by-step fashion.

The right side of the brain thinks differently. It prefers pictures to words and numbers. It tries to see the whole picture, and looks for connections and how things are related. The right brain does not think in a step by-step fashion. A right-brain person may arrive at the same answer but did not go through a step-by-step process to arrive at the answer.

The left side of the brain is very logical, planned and organized. The right side is intuitive and prefers open-ended situations and pictures rather than words. We all use both sides, but we prefer one side or the other. We learn more easily one way than the other.

CLOTH CHART #3 and HANDOUT #7--Flower and Parts

The left side of the brain analyzes a flower and breaks it down into its parts. Remember that on the brain chart we said the left brain analyzes. The right brain connects the parts and sees the whole flower.

HANDOUT #8--Right/Left Brain Characteristics

Pass out and review characteristics of people on each side of horseshoe.

People who prefer left-brained learning activities tend to do well in traditional classrooms, while people who learn best using right-brain techniques have not had much attention in the past. Now we'll talk about some techniques for teaching people with right brain preferences, because these children often have problems in school if the teacher uses only techniques for left-brained children. Often these children quit school because they think they can't learn. But if the teacher uses right-brained techniques part of the time, these children will have a better chance to learn.

Have participants return to their seats.

CLOTH CHART #4 and HANDOUT #9--Right-brain Teaching Techniques

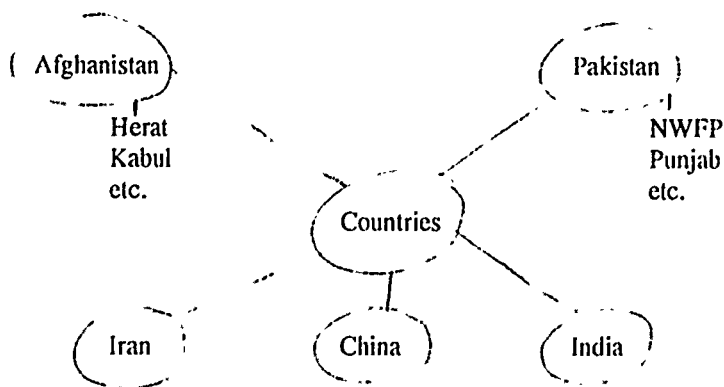
Here are some right-brain activities. Even if you are left-brained, you will have students in your class who learn best with right-brain activities, so you will need to know techniques for teaching using right-brain activities. Are any of these familiar to you?

Which ones?

Can you tell us what it is? Give an example?

EXAMPLES:

Mind mapping--Take a single concept and write down everything you think of related to that concept.



Visualization--Picture in your mind.

Imagery--Tell students a story and have them describe things they can see, hear, taste, smell or feel.

Poetry

Art

Auditory/Visual/Kinesthetic--Children like to use all their senses. They learn best when they can listen, look, feel and experience.

Children who prefer to learn with their right brain need to do these kinds of things, so be sure to include them in planning lessons.

CLOTH CHART #5 & HANDOUT #10--The 4MAT Model: An Overview

Review questions for each quadrant: Why? What? How? If?

In each quadrant, there are right and left-brained learners.

This chart combines what we know about Type 1, 2, 3, 4 learners and right/left brain preferences.

In planning units, a teacher plans a variety of experiences so that students will be able to learn in preferred ways during parts of a lesson and will need to "stretch" or adapt for parts of the lesson. Using the learning cycle on the chart and handout is one way to ensure that the lesson will accommodate students with different learning styles.

Review steps on chart, beginning with A, Creating an Experience, and continuing around the circle.

In planning a unit, the teacher first determines the concepts/skills to be developed in 2d (left mode). Then the teacher begins planning the unit with 1a (right mode).

1a (right mode) WHY? Create an experience. Have students do something that is connected to their lives now. It is important that this experience have personal meaning for students.

1b (left mode) Discuss and analyze the experience. Step outside the experience and analyze what happened. What did they discover about themselves?

2c (right mode) WHAT? Take students from the personal experience to broader reality. Use metaphors, analogies, guided imagery.

2d (left mode) Teach concepts/skills that are significant, using lecture, texts, videos, guest speakers, etc. This part should be systematic and sequential.

3e (left mode) HOW? Students practice using workbooks, worksheets, exercises, questions, etc. Students try it out.

3f (right mode) Move students to personal usefulness. Let them add something of themselves. Encourage them to experiment with their new learning.

4g (left mode) IF? If I know this, what can I do with it in real life? Analyze what has been learned: How does it fit into my life? Is it useful? What questions does it raise?

4h (right mode) Do something different that goes beyond what was learned. Share it with others.

Day 3 (4 hours)

Review learning cycle and right/left characteristics, ask questions to check participants' understanding.

Next we'll review a sample lesson plan.

HANDOUT #11--Sample lesson plan

The objective of this lesson is to develop the concepts of size by distinguishing things that are large, medium, and small.

Review steps in the cycle and an example of each step from the sample lesson plan.

HANDOUT #12--Unit Plan Form

Form groups of three. Using the UNO/ESSP scope and sequence for the subject(s) a teacher will teach, choose a topic, decide what concepts/skills need to be taught, and develop one unit plan as a group. Have participants write the topic and the names of group members across the top of the page.

Observe participants to check their understanding. Do activities match the quadrant and left/right mode in the unit cycle?

Share unit plans with the entire group.

Follow-up

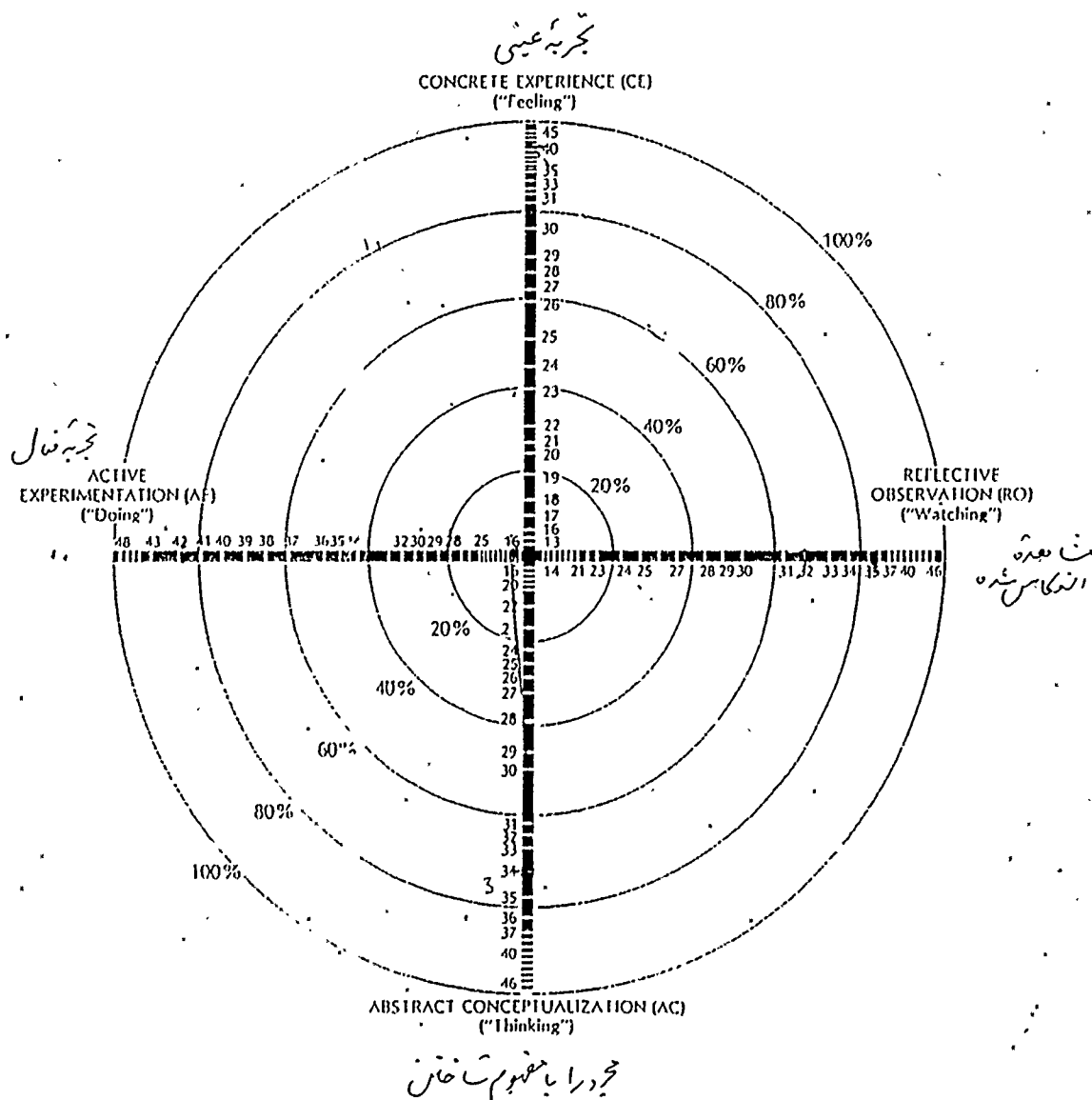
Ask participants to use 4MAT in developing unit plans during the next two weeks. If possible, meet with participants again to share their plans, answer questions that arose when they tried to write unit plans on their own, and check for understanding.

Appendix A

Workshop Handouts

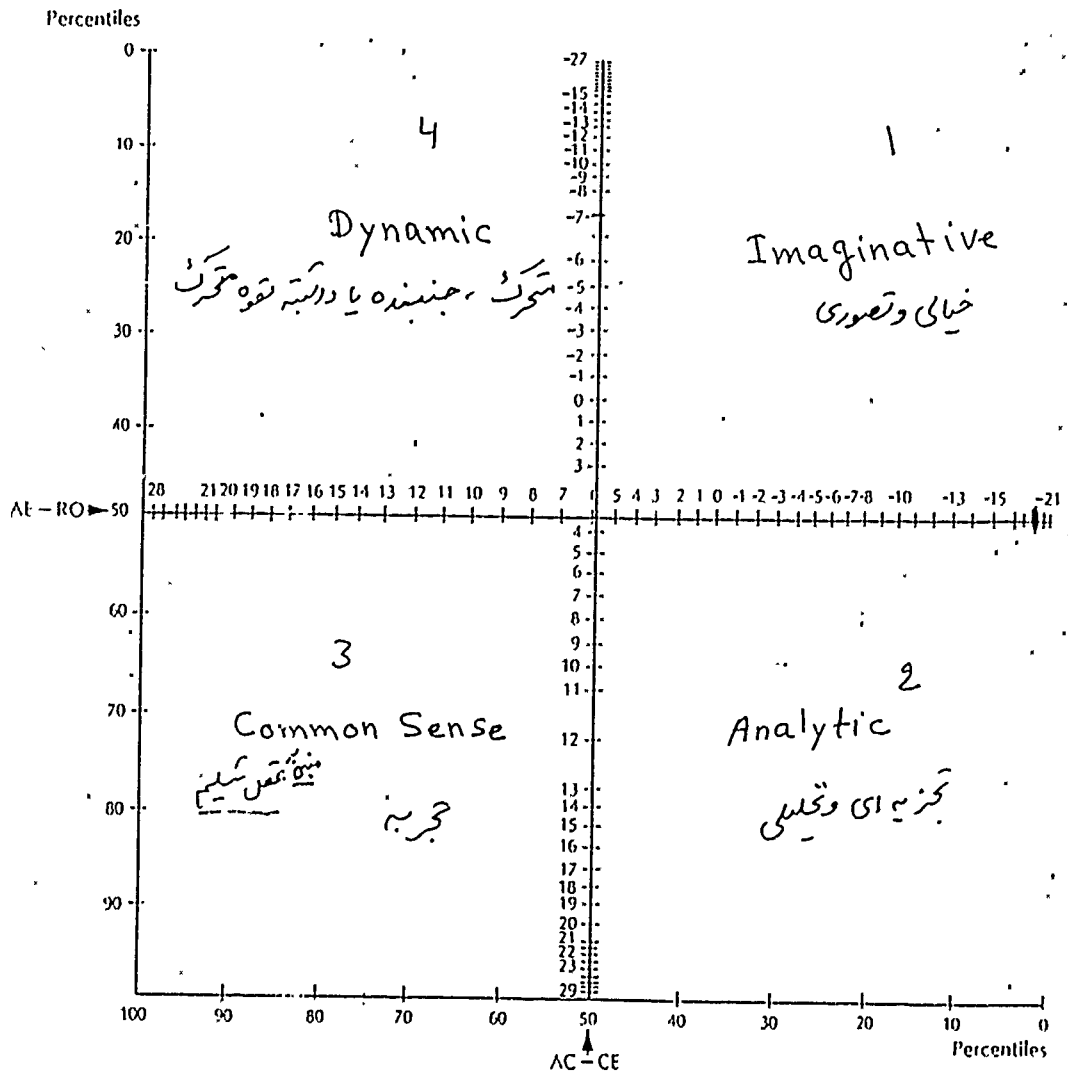
The Cycle of Learning

دوران آموزشی



Learning-Style Type Grid

روش آموزش تالیف یا به شکل Grid

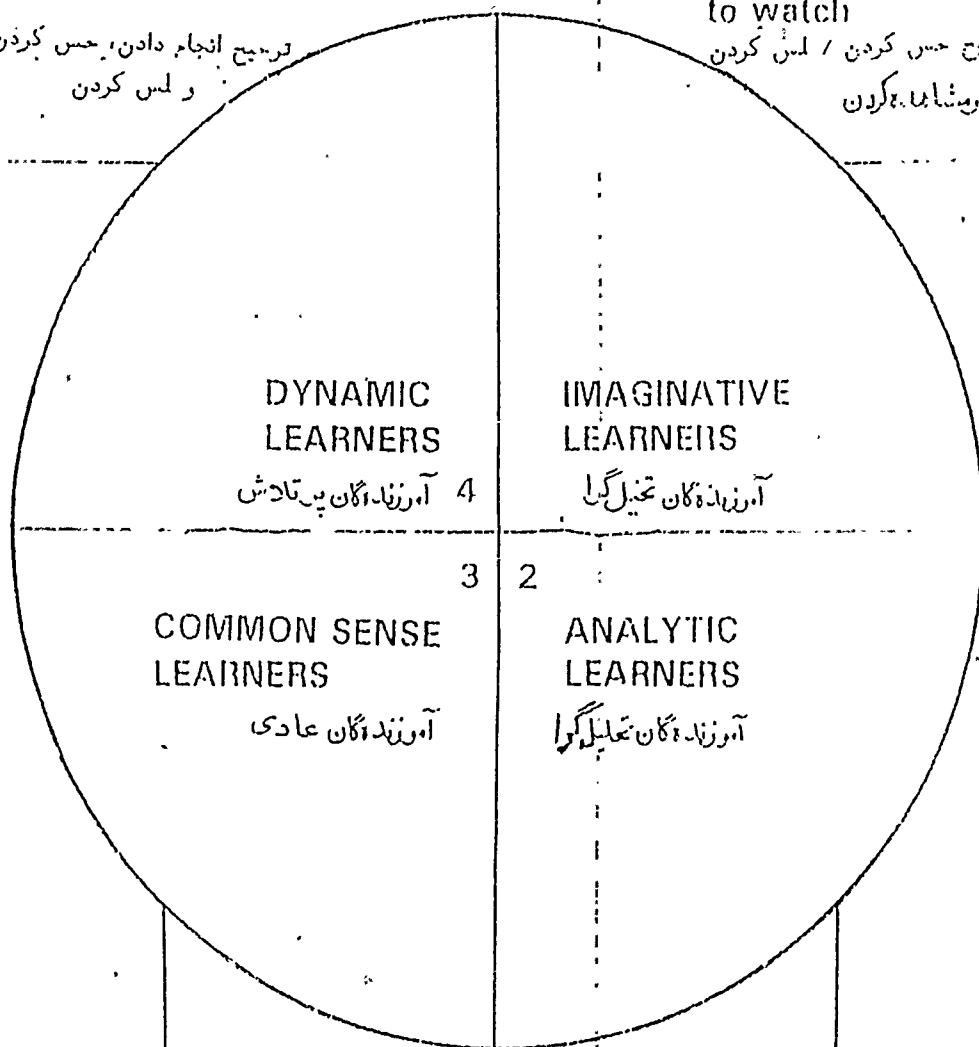


Prefer to do and
to sense/feel

ترجیح انجام دادن، حس کردن
و لمس کردن

Prefer to
Sense/feel and
to watch

ترجیح حس کردن / لمس کردن
و مشاهده کردن



Prefer to think
through concepts
and try things out
for themselves

ترجیح دادن تفکر تا انجام مفاهیم
و آزمایش اشیا برای خود

Prefer to combine
watching with
thinking through
concepts

ترجیح دادن ترکیب مشاهده
با تفکر تا انجام مفاهیم

آموزنده های روشن اول :

- آنها بوسیله گوش دادن به موضوع و سپس گرفتن نظریات با دیگران می آموزند .
- آنها هم چنان میگویند شخصی در مسائل دخیل باشند .
- آنها همچنان مردان متفکر بوده و انجمنی می اند که از مشاهده دیگران خوشحال می باشد .

منیث معلمین ایشان :

- به سباحت و صحبت کردن ، کار روی و راستد لال واقعیتها علاقه مند میباشند .
- آنها میگویند تا در موضوعات بهم دخیل بوده و موضوعات را با هم دیگر می کنند تا از آن آموزنده های روشن دوم :
- آنها میگویند بدانند که انجمنی منسجم و عالم در مورد مسائل و موضوعات چه فکر می کند
- ایشان در مورد مسائل به جزئیات و توفیقات خود در دارند .
- به صورت که به نشیوه و میثاق و اصول منشی بر سرش می گذارند و تدریس می کنند و علاقه مند میباشند
- آنرا به نظریات بیشتر علاقه مند میباشند تا به انجمنی من

منیث معلمین آنها :

- به انتقال تجارب و سوسو با دیگران علاقه مند میباشند
- آنها میگویند همه قدر که ممکن باشد دخیل و بر معلوم میباشند
- ایشان به حقایق و جزئیات مسائل ، متفکر با سلسله و عدم بقدم و همگی به نظم علاقه مند میباشند

آموزنده های روشن سوم :

- آنها بوسیله آزماین نظریات و تطبیق در طریق تجربه می آموزند
- آنها هم چنان از ارائه جواب قدری دیگران بر آشفته میگردند
- آنها نظریات آموخته شده را تجربه میکنند
- ایشان هم چنان میگویند بدانند که مسائل چگونه عمل و تجربه می شود

منیث معلمین ایشان :

- میگویند تا به مردم یا انجمنی مهارت ها را که آنها در زندگی خود دارند توضیح نمایند
- آنها هم چنان میگویند جوانب محلی را در نظر گرفته مسائل را تجربه نمایند
- آنها همیشه مهارت های تکنیکی علاقه مند بوده و فعالیت ها را تجربه می نمایند

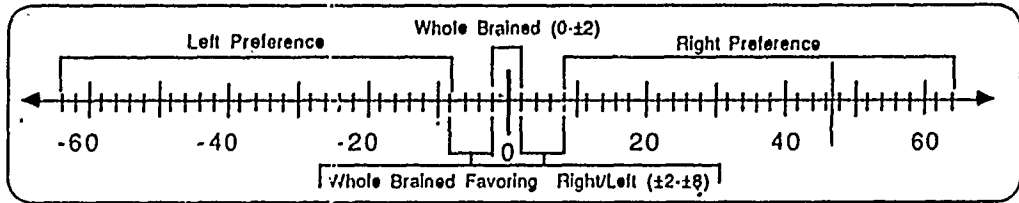
آموزنده گان روش ما را :

- آنها از طریق آزمون دخیل می شوند
- آنها به کشف شخصی خود علاقه مند می شوند
- ایشان همواره در مورد آموختن مسائل علاقه مندی زیاد و اشتیاق زیاد دارند
- آنها هم ضایع در مورد مسائل و نواقض نیز می مانند
- هم فنان ایشان خلوت کرده بوده یا اینکه خلوت را همیشه قبول می کنند

ایشان منیر معین :

- نیمه کف مسائل توسط خود آموزنده یا مادر در خود آموزنده در کف مسائل علاقه دارند
- آنها هم ضایع به آموختن تجربی علاقه دارند و آن را استوای می بینند
- ایشان در مورد متودهای تدریس تنوع طلب بوده و تنوع در مسائل را ترجیح می دهند

HEMISPHERIC MODE INDICATOR SCORING KEY



Column A

Column B

1.	-2	1	11	+2
2.	-2	-1	11	+2
3.	12	+1	1	2
4.	2	-1	11	12
5.	12	+1	1	2
6.	12	+1	1	2
7.	-2	1	+1	12
8.	-2	-1	11	12
9.	+2	11	1	2
10.	+2	11	-1	2
11.	+2	11	1	2
12.	2	1	11	+2
13.	2	1	+1	12
14.	2	1	11	+2
15.	+2	11	1	2
16.	-2	1	11	+2
17.	12	+1	1	2
18.	-2	-1	11	12
19.	+2	11	1	2
20.	2	1	11	+2
21.	2	1	+1	12
22.	-2	1	11	+2
23.	2	-1	11	+2
24.	+2	11	1	2
25.	2	1	11	+2
26.	+2	11	1	2
27.	12	+1	1	2
28.	2	1	11	+2
29.	+2	11	1	2
30.	2	-1	11	+2
31.	+2	11	1	2
32.	2	1	+1	12

1.) Total all the minus numbers.

Total minus = _____

2.) Total all the plus numbers.

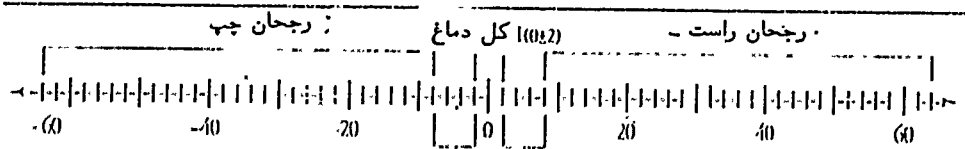
Total plus = _____

3.) Compute the difference.

=

4.) Mark your score above.

کلید نمرات معرّف مود نیم کره دماغ



12-13 راست / چپ خواسته های کل دماغ

(۱) مجموع نمرات منفی را جمع کنید.

مجموع منفی ها =

(۲) مجموع نمرات مثبت

مجموع =

(۲) فرق آنها =

(۳) نمره خود را بالای آن نوشته کنید

حالا ممکن نوع آهوش خود را در

گراف تکمیل کرده باشید.

+2	+1	-1	-2	1.
+2	+1	-1	-2	2.
-2	-1	+1	+2	3.
+2	+1	-1	-2	4.
-2	-1	+1	+2	5.
-2	-1	+1	+2	6.
+2	+1	-1	-2	7.
+2	+1	-1	-2	8.
-2	-1	+1	+2	9.
-2	-1	+1	+2	10.
-2	-1	+1	+2	11.
+2	+1	-1	-2	12.
+2	+1	-1	-2	13.
+2	+1	-1	-2	14.
-2	-1	+1	+2	15.
+2	+1	-1	-2	16.
-2	-1	+1	+2	17.
+2	+1	-1	-2	18.
-2	-1	+1	+2	19.
+2	+1	-1	-2	20.
+2	+1	-1	-2	21.
+2	+1	-1	-2	22.
+2	+1	-1	-2	23.
-2	-1	+1	+2	24.
+2	+1	-1	-2	25.
-2	-1	+1	+2	26.
-2	-1	+1	+2	27.
+2	+1	-1	-2	28.
-2	-1	+1	+2	29.
+2	+1	-1	-2	30.
-2	-1	+1	+2	31.
+2	+1	-1	-2	32.

کره چپ دماغ

Left Hemisphere

کره راست دماغ

Right Hemisphere



CAT کلمات Words

6

اعداد Numbers

Images تصاویر



Patterns روش

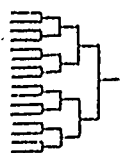
Rhythms ریتم

Analysis (Parts)

تجزیه، تحلیل اجزا

Synthesis Wholes

ترکیب عمومی



Logical Sequential Linear

تسلسل منطقی و منطقی دماغ

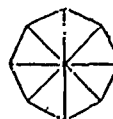
UNO/ESSP/CDET/DS

L

R

Relationships Simultaneous Patterns Connections

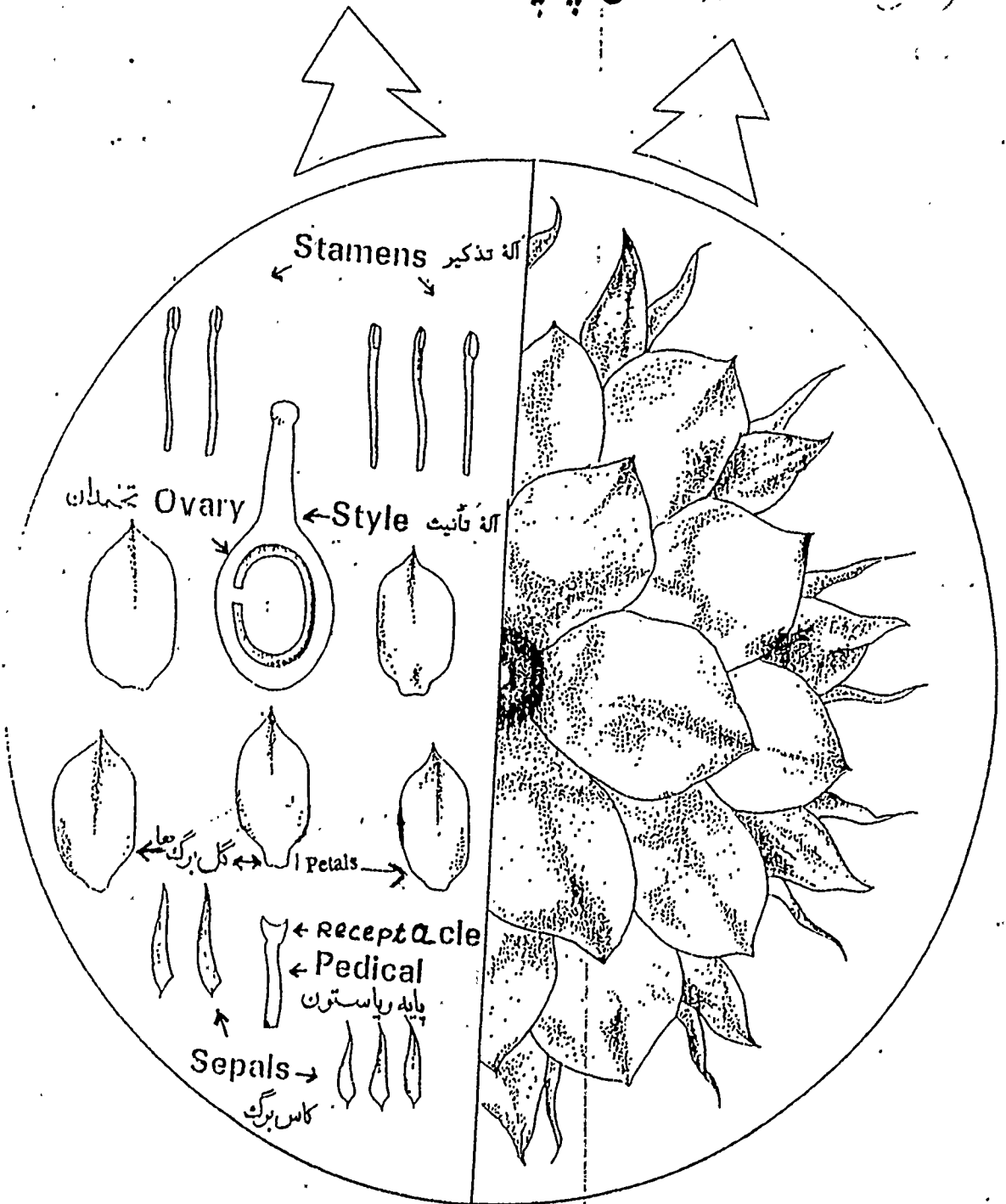
ارتباطات همزمان با روش مربوط آن



IMDC

برای
رسم کردن چپ و راست منظر

۶



چپ L

راست R

(۹)

۴



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Bernice McCarthy, Ph.D., Director

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RIGHT/LEFT MODE CHARACTERISTICS

LEFT MODE

Rational

Responds to verbal instructions

Controlled, systematic experiments

Problem solves by logically and sequentially
looking at the parts of things

Makes objective judgements

Looks at differences

Is planned and structured

Prefers established, certain information

Analytic reader

Primary reliance on language on thinking and
remembering

Prefers talking and writing

Prefers multiple choice tests

Controls feelings

Responsive to structure of environment

Prefers hierarchial (ranked) authority
structures

Sequential

Is a splitter: distinction important

Talks, and talks, and talks

Is logical, sees cause and effect

Draws on previously accumulated, organized
information

RIGHT MODE

Intuitive

Responds to demonstrated instructions

Open-ended, random experiments

Problem solves with hunches, looking for
patterns and configurations

Makes subjective judgements

Looks at similarities

Is fluid and spontaneous

Prefers elusive, uncertain information

Synthesizing

Primary reliance on images in thinking and
remembering

Prefers drawing and manipulating objects

Prefers open-ended questions

Free with feelings

Essentially self-acting

Prefers collegial (participative) authority
structures

Simultaneous

Is a lumper: connectedness important

Is mute - uses pictures, not words

Is analogic, sees correspondences,
resemblances

Draws on unbounded qualitative patterns that
are not organized into sequences, but that
cluster around images of crystallized
feelings

مشخصات مود راست و چپ

مود چپ	مود راست
معقول	درک مستقیم
به هدایات شفاهی عکس العمل نشان میدهد	به آموزش نمایشی عکس العمل نشان میدهد
کنترل شده، تجارب منظم	تجارب اتفاقی
مشکلات را منطقی و تسلسلی حل میکند و به	نامنتهی مشکلات را به اساس حدس فیصله میکند،
جزئیات اشیاء توجه میکند .	در جستجوی نمونه ها و مدل ها میباشد
قضایات آلفائی و واقعی میکند	تفاوت عندی را انجام میدهد
تفاوت ها را در نظر میگیرد.	مشابهت ها را می بیند
منظم و پلان شده است .	بی تکلف و حاضر جواب است
به معلومات اساسی و معین شده ترجیح میدهد	روائی مربی تکلفی سخن میزند.
خواننده تحلیل گرا است	در تفکر و یادآوری در درجه اول بالای حساسات
اعتماد اول مبتنا بر اسان، تفکر و بخاطر داشتن	خود متکی است
گپ زدن و نوشتن را ترجیح میدهد	رسم و کار های عملی را ترجیح میدهد
سوالات دارای جوابهای انتخابی را میدهد احساس را	سوالات نامنتهی را ترجیح میدهد
کنترل میکند	عاری از احساسات
به ساختار محیط عکس العمل نشان میدهد	اساساً متکی به خود
چوکات مرتبه بی صلاحیت را ترجیح میدهد	ساختار سهمگیری دسته جمعی را ترجیح میدهد.
تسلسل	هزمان
تجزیه کننده است، تشخیص مهم است .	یکجا کننده است مرتب‌البران مهم است
(پر گو)	سیار کم حرف است، عکس ها را اشکال را
منطقی است ، مد ، و معلول را مورد توجه قرار	استعمال میکند نه کلمات
میدهد.	مقایسه کننده است تفاوت مشابه و مغایر را مورد
براساس معلومات منظم قبلی و جمع شده نتیجه	توجه قرار میدهد.
گیری میکند.	به اساس نمونه های نامحدود کیفیتی نتیجه گیری
	میکند که به صورت تسلسلی تنظیم نگردیده لکن
	بدورادرتصورات واضح احساسات دسته بندی
	گردیده اسم.

1. Metaphor ۱- استعاره
2. Visualization ۲- مصورساختن
3. Imagery ۳- تعبیل
4. Paradox ۴- ضد و نقیض
5. All Forms of Poetry ۵- تمام انواع شعر
6. All Activities which respect intuition ۶-۱. فعالیت‌هایی که به قوا ادراک احترام گذاشته شده باشد.
7. All Fine Arts: ۷- تمام هنرهای زیبا
- 7.1 Drawing ۷-۱ رسامی
- 7.2 Painting ۷-۲ نقاشی
- 7.3 Music ۷-۳ موسیقی
- 7.4 Creative Dramatics ۷-۴ درامه های ابتکاری
- 7.5 Creative Writing ۷-۵ نوشتن ابتکاری
- 7.6 Movement ۷-۶ حرکت
- 7.7 Physical Education ۷-۷ تربیت بدنی
8. Modalities ۸- چگونگی:
- 8.1 Audio ۸-۱ سمعی
- 8.2 Visual ۸-۲ بصری
- 8.3 Kinesthetic ۸-۳ حرکتی
- 8.4 Mixed ۸-۴ مخلوط آن
9. Most forms of Doing, i.e., performance ۹- اکثر انواع عمل کرد بطور مثال:
- 9.1 Building ۹-۱ انجام دادن
- 9.2 Role Playing ۹-۲ تعبیر
- 9.3 Simulations ۹-۳ اهرای نقش
- 9.4 Demonstrations ۹-۴ نظامر
- 9.5 Experiments ۹-۵ فعالیت‌های ناشی
10. All Kinds of Connections: ۱۰- تمام انواع ارتباطات:
- 10.1 Patterning & Configuration ۱۰-۱ نظام کردن و بهم ساختن
- 10.2 All Synthesis ۱۰-۲ تمام ترکیبات
- 10.3 Mind-Mapping, i.e., grouping own thoughts or ideas ۱۰-۳ نقشه افکار (خودی) گروپ بندی افکار و نظریات خودی
- 10.4 Clustering, i.e., grouping other's thoughts or ideas ۱۰-۴ (گروپ بندی) افکار و نظریات دیگران
- 10.5 Analogies ۱۰-۵ استدلال
- 10.6 Paradox ۱۰-۶ ضد و نقیض
11. Mathematical Conceptualization ۱۱- با مفهوم ساختن ریاضی
- 11.1 Geometry ۱۱-۱ هندسه
- 11.2 Spatial Relationships ۱۱-۲ ارتباطات فاصله فضائی

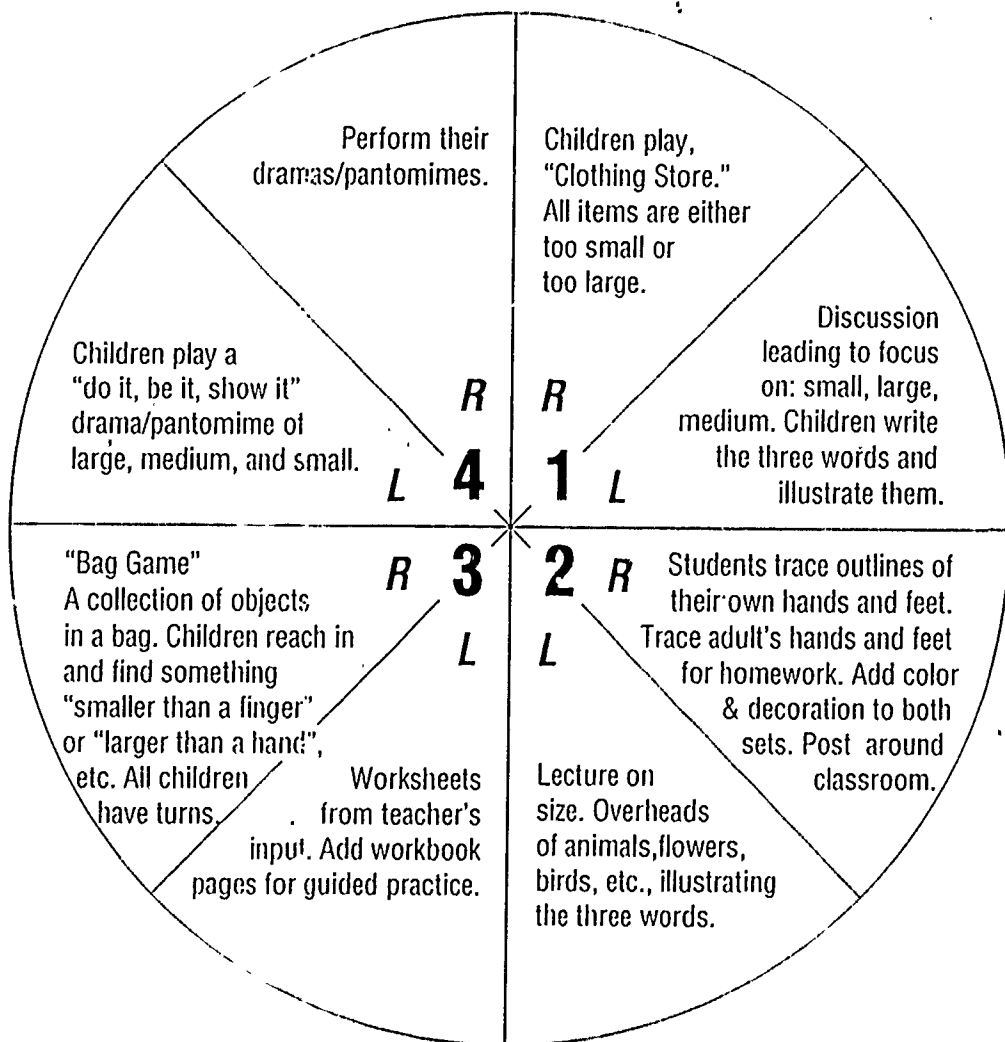
THE 4MAT MODEL: AN OVERVIEW





4MAT SAMPLE LESSON PLAN: PRIMARY

Size



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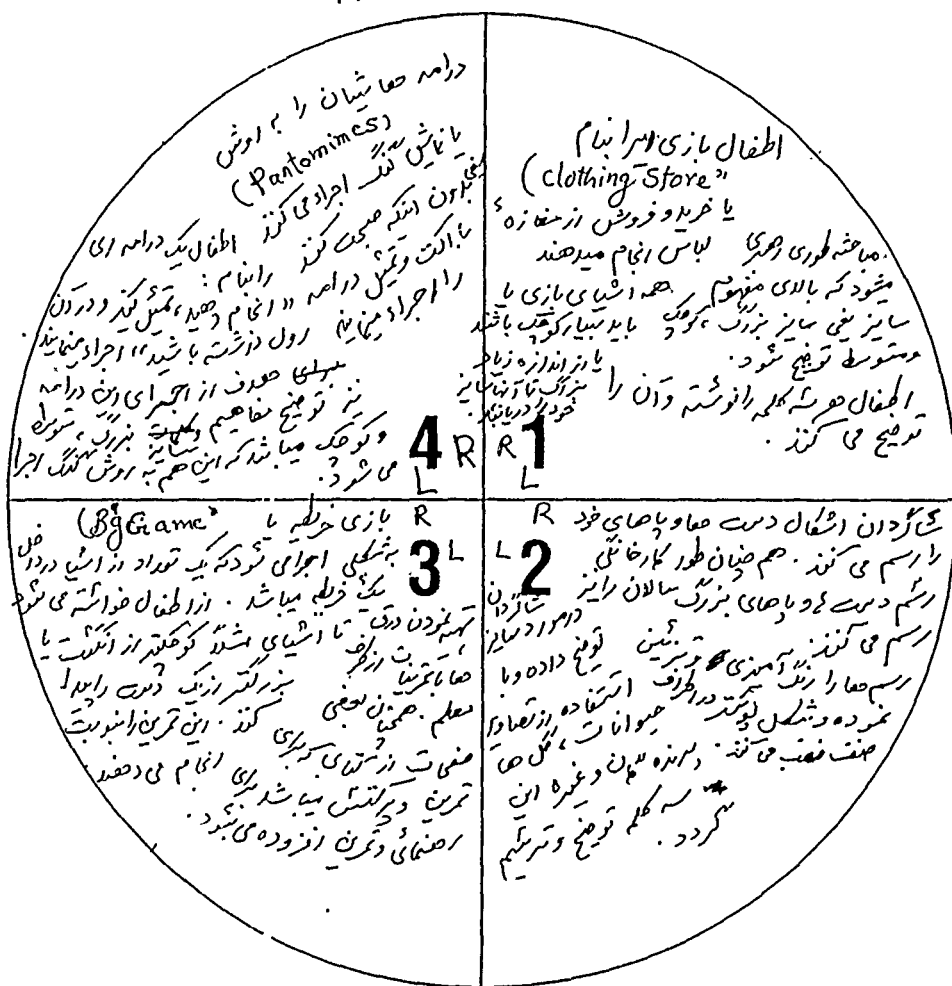
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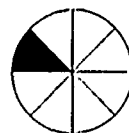
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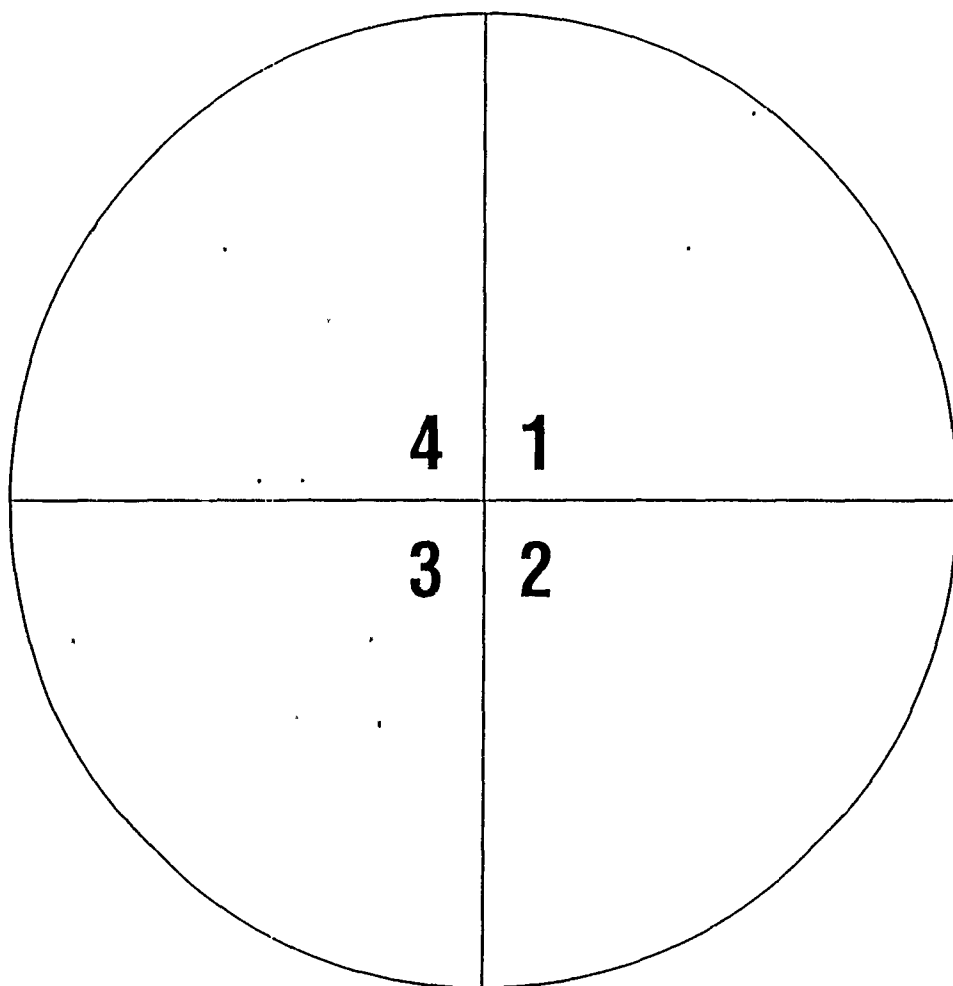
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نوت درباره روشهای آموزشی برای کمک کردن صو چهار اروپا روشهای آموزشی را بهتر نشان طرق مطالعه





Notes on strategies for helping all four learning styles improve study habits...



52

Appendix B

Inventories

Learning-Style Inventory: Instructions

The Learning Style Inventory describes the way you learn and how you deal with ideas and day-to-day situations in your life. Below are 12 sentences with a choice of four endings. Rank the endings for each sentence according to how well you think each one fits with how you would go about learning something. Try to recall some recent situations where you had to learn something new, perhaps in your job. Then, using the spaces provided, rank a "4" for the sentence ending that describes how you learn best, down to a "1" for the sentence ending that seems least like the way you would learn. Be sure to rank all the endings for each sentence unit. Please do not make ties.

Example of completed sentence set:

0 When I learn 4 I am happy. 1 I am fast. 2 I am logical. 3 I am careful

- | | | | | |
|-----------------------|---|---|--|---|
| 1 When I learn | <u> </u> I like to deal with my feelings | <u> </u> I like to watch and listen | <u> </u> I like to think about ideas | <u> </u> I like to be doing things. |
| 2 I learn best when: | <u> </u> I trust my hunches and feelings. | <u> </u> I listen and watch carefully. | <u> </u> I rely on logical thinking | <u> </u> I work hard to get things done. |
| 3 When I am learning | <u> </u> I have strong feelings and reactions | <u> </u> I am quiet and reserved | <u> </u> I tend to reason things out | <u> </u> I am responsible about things |
| 4 I learn by: | <u> </u> feeling | <u> </u> watching | <u> </u> thinking. | <u> </u> doing |
| 5 When I learn | <u> </u> I am open to new experiences | <u> </u> I look at all sides of issues | <u> </u> I like to analyze things, break them down into their parts | <u> </u> I like to try things out |
| 6 When I am learning: | <u> </u> I am an intuitive person | <u> </u> I am an observing person. | <u> </u> I am a logical person | <u> </u> I am an active person |
| 7 I learn best from | <u> </u> personal relationships | <u> </u> observation | <u> </u> rational theories | <u> </u> a chance to try out and practice |
| 8 When I learn | <u> </u> I feel personally involved in things. | <u> </u> I take my time before acting | <u> </u> I like ideas and theories | <u> </u> I like to see results from my work. |
| 9 I learn best when | <u> </u> I rely on my feelings | <u> </u> I rely on my observations | <u> </u> I rely on my ideas | <u> </u> I can try things out for myself |
| 10 When I am learning | <u> </u> I am an accepting person | <u> </u> I am a reserved person | <u> </u> I am a rational person | <u> </u> I am a responsible person. |
| 11 When I learn | <u> </u> I get involved | <u> </u> I like to observe | <u> </u> I evaluate things | <u> </u> I like to be active |
| 12 I learn best when: | <u> </u> I am receptive and open-minded. | <u> </u> I am careful | <u> </u> I analyze ideas | <u> </u> I am practical |

CE

RO

AC

AE

لست شیوة آموزش : هدايات

لست شیوة آموزش طریقه یی را تشبیح میکند، که شما توسط آن می آموزید، که چگونه با نظریات و حالات زنده کی روزمره خود عمل کنید. در ذیل این صفحه ۱۲ جمله داده شده است، که هر جمله آن را از چار خانه و انتخابی برخوردار میباشند. خانه هر جمله را چنانکه شما خود بهتر فکر میکنید که باطرز آموزشی تان سازگار است باگذاشتن اعداد ۱-۴ در جاهای خالی درجه بندی کنید. سعی کنید بعضی حالات تازه را به خاطر بیارید، که باید در آن چیزی، نوری را مثلا در وظیفه خود می آورید. سپس با استفاده از جاهای خالی رقم ۱ را به مقابل جمله یی که طرز آموزش شما را به بهترین وجه بیان میکند، بگذارید. به همین ترتیب عدد ۲ را به جمله دلخواه بدهی، خود، عدد ۳ را به جمله دلخواه سومی و عدد ۴ را به جمله یی که طرز آموزش شما را به کترین وجه بیان میکند بگذارید. متیقن باشید تا تمام انتخاب ها را برای هر جمله درجه بندی کرده باشید.

مثال يك جمله تکمیل شده

رتبه میاومزم : - خویش میبشردم - به تنندی پیش میردم - منطقی فکر میکنم - محتاط میباشند

۱- رتبه میاومزم :	بشروالم از سولس خود	بشروالم شامده کتم و کوش	بشروالم در مورد نظریات	بشروالم درکارما دخیل باشم
	کار بکنم	بدم	فکر کنم	
۲- رتی به بیشترین وجه میآموزم :	که به مقابله و سولس خود	که کوش کتم وحقا شامده	که به فکرمنطقی اعتماد کنم	که به شدت کارکتم ناکار مارا
	فکارا کنم	کنم	انجام دهم	
۳- رتی که درسال آموزش میباشم	سولس و مکس المشیای قوی	غامویشی رنبرد دلوای اختیار	درکارما ازاستقلال کار میکنم	در کارما اسلوس سولیت میکنم
	میانقت باکنم	میکنم		

HEMISPHERIC MODE INDICATOR (HMI)

INSTRUCTIONS For each numbered item there are four possible choices. Either choose "a lot" or "somewhat" from the column A side, or "a lot" or "somewhat" from the column B side. For example, I prefer dogs "a lot" or "somewhat" – or – I prefer cats "a lot" or "somewhat". Choose one answer for each numbered item. Place an O in the appropriate blank.

Example:

Column A		Column B	
A lot	Somewhat	Somewhat	A lot
prefer dogs	O		prefer cats

Column A	A lot	Somewhat	Somewhat	A lot	Column B
1. bases decisions on facts					bases decisions on feelings
2. prefers organized structure in a work setting					prefers open-ended work setting
3. carefree, spontaneous					careful, deliberate
4. understands how the pieces fit together					understands from experience
5. tries hunches					approaches problems logically
6. like an athlete or artist					like an accountant or chemist
7. like a tax lawyer					like a criminal lawyer
8. neat					sloppy
9. process oriented					product oriented
10. improvising new ideas					thoughtful, both feet on the ground
11. prefers change and the unusual					prefers order and stability
12. recalls information, names					recalls faces, dress, actions
13. precise in language					free, sweeping terms
14. focus on words said and the message					takes in body language, emotional tone
15. holistic, intuitive					orderly, sequential
16. words and numbers					space and form
17. synthesizing					analyzing
18. abstract					concrete
19. emotional					rational
20. objective					subjective
21. waking					dreaming
22. timebound					timeless
23. realistic					idealistic
24. lead by the heart					lead by the mind
25. specific					ambiguous
26. community					agency
27. outlook					insight
28. cause and effect					resemblances
29. lumpers					splitter
30. intellectual rigor					imagination
31. soft					sharp
32. persist					encompass

هدایات

در اینجا برای هر فقره چهار انتخاب ممکن است. یکی از این یعنی 'بسیار' یا 'یک اندازه' به تحت ستون الف و دیگر آن دو یعنی 'بسیار' یا 'یک اندازه' مربوط ستون ب میباشد.

بطور مثال: من سگهارا 'بسیار' یا 'یک اندازه' ترجیح میدهم و یا من پشکهارا 'بسیار' یا 'تا یک اندازه' ترجیح میدهم، برای هر فقره جواب را انتخاب نموده دایره (o) را در خالیگاه مناسب بگذارید.

مثال	ستون الف	بسیار	تا اندازه ی	تا اندازه ی	بسیار	ستون ب
ترجیح سگ						ترجیح پشک

ستون الف	بسیار	تا اندازه ی	تا اندازه ی	بسیار	ستون ب
۱- باساس عقابن تصمیم میگیرد					۱- باساس احساسات تصمیم میگیرد
۲- ساحه کارها حرکات تنظیم شده را ترجیح میدهد					۲- ساحه کار آزاد را ترجیح میدهد
۳- بی پاکانه و خود بخودی					۳- محتاط، مضم
۴- میدانند که اجزاء باهم مطابقت دارد					۴- از تجربه میدانند
۵- حدسیات را امتحان میکند (بکار میبرد)					۵- مشکلات بصورت منطقی برخورد میکند
۶- مانند یک ورزش کار یا هنرمند					۶- مانند یک محاسب یا کیمیدان
۷- مانند یک قانون دان مالی					۷- مانند یک قانون دان جنایی
۸- ستره و با سلیقه					۸- بی سلیقه
۹- علاقه مند طرز العمل					۹- علاقه مند محمول
۱۰- بهرود بخشیدن به نظریات جدید					۱۰- باورش، متکی به خود
۱۱- تحول و غیر معمول را ترجیح میدهد					۱۱- نظم و ثبات را ترجیح میدهد
۱۲- معلومات و نام هارا بیاد می آورد					۱۲- چهره ها، لباس و اعمال ها را بیاد می آورد
۱۳- در لسان دقیق اند					۱۳- آزاد اصطلاحات ناسنجیده
۱۴- تمرکز بالای کلمات و پیغام ارائه شده					۱۴- کل زبان و آهنگ احساساتی را در نظر میگیرد
۱۵- همه جانب، درک مستقیم					۱۵- نظم، تلسل

Appendix B

Supervisory Handbook (Classroom Instruction)

DRAFT

Supervisory Handbook

(Classroom Instruction)

**Prepared in collaboration with UNO/ESSP
Master Teacher Trainers (male and female)
and Specialist Facilitators, Zalmei Sherzad
and Jalat Khan Hekmaty**

Lynn Evans

7 June 1993

Introduction/Purpose

This handbook is designed for use by headmasters and head teachers in working with classroom teachers to improve learning outcomes for students. It is designed as a **guide** for headmasters and head teachers in their roles as instructional leaders, not a prescription. It includes a conceptual basis, information about components and indicators of quality teaching and learning, and suggestions for utilization of available resources. It may be used as a basis for inservice education and staff development.

Throughout this handbook, emphasis is placed on working with teachers to improve learning outcomes for students. The supervisory role is viewed as one of working with teachers as a facilitator, not as an inspector. While this may represent a shift from traditional views of the role of the supervisor, it is an important distinction if teachers are to work collaboratively with headmasters and head teachers as instructional leaders, so that all parties focus on improved learning outcomes for children.

A variety of Afghan educators provided important ideas and input as this version of the handbook was developed. These educators included UNO/ESSP specialist facilitators and master teacher trainers. Additionally, content and indicators of effective teaching were adapted from the System for Teaching and learning Assessment and Review (STAR) by Ellett, Loup & Chauvin, 1991. Included are 35 indicators for the supervision and improvement of classroom instruction (See appendix A).

Table of Contents

Introduction/Purpose

Conceptual Basis/Common Themes

Content and Structure of the Handbook

Section I: Preparation and Planning

- A. Individual Differences
- B. Teaching Aids and Materials
- C. Homework (Home learning)
- D. Assessments

Section II: Classroom Management

- A. Monitoring and Maintaining Student Behavior
- B. Class Structure (Task Orientation)
- C. Student Engagement

Section III: Learning Equity

- A. Equity for All Students
- B. Interpersonal Relationships

Section IV: Effective Teaching

- A. Clarity of Presentation
- B. Use of a Variety of Teaching Methods and Learning Tasks
- C. Use of Teaching Aids and Learning Materials
- D. Enthusiasm
- E. Feedback

Section V. Supervisory Techniques

A. Observing Classes

B. Conference Skills

1. Rationale/Purpose of Conferences
2. Observation/Conference Process

C. Questioning to Facilitate Collaboration

1. Asking Questions
2. Recognizing/Dignifying Responses
3. Encouraging Questions from the Teacher
4. Developing Open-ended Questions
5. Sample Questions

Conceptual Basis/Common Themes

The focus of this handbook is the enhancement of teaching and learning, and it is grounded in a variety of important "common themes." These common themes represent essential "key ideas" that form the philosophical basis underlying the handbook. The key common themes are as follows:

- All Students Can Learn
 - Teaching and Learning
 - Role of Preparation, Planning and Evaluation
 - Knowledge of
 - a. Pedagogy
 - b. Content
 - c. Curriculum
 - Time
 - Active Involvement/Engagement
 - Individual Differences
 - Quality Learning Environment
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Each of the common themes represents a conceptual "thread" that ties the sections of the handbook together as a whole system. It is deliberately designed to define quality teaching practices in terms of their linkages to student interest and involvement in learning. The ideas are contextually-based; that is, the unique context characteristics of each classroom are considered in any determination of the quality and effectiveness of teaching and learning. Specific examples of indicators supporting the common themes are shown in the matrix in figure 1.

Content and Structure of the Handbook

This handbook consists of five sections. The first four sections of the handbook are related to quality teaching and learning. The 35 indicators operationalize the dimensions of quality teaching and learning and utilization: I) Preparation and Planning; II) Classroom Management; III) Learning Equity; and IV) Effective Teaching. The dimension of Preparation and Planning consists of four components, Individual Differences, Teaching Aids and Learning Materials, Homework (Home Learning), and Assessments. The dimension of Classroom Management is further broken down into components of Monitoring and Maintaining Student Behavior, Class Structure (Task Orientation), and Student Engagement. Learning Equity includes Equity for All Students and Interpersonal Relationships. The dimension of Effective Teaching consists of the components of Clarity of Presentation, Use of a Variety of Teaching Methods and Learning Tasks, Use of Teaching Aids and Learning Materials, Enthusiasm, and Feedback.

Indicators comprising the first dimension of Planning and Preparation emphasize planning in a manner that accommodates individual differences among students in learning objectives and activities, effectively plans for the use of teaching methods and learning tasks and aids and materials, and carefully specifies home work (home learning) assignments and formal assessment and evaluation procedures.

The second dimension, Classroom Management, is operationalized by a set of indicators that reflect the teacher's ability to manage student behavior, structure an efficient classroom so that time is conserved for teaching and learning, and maintain student engagement in learning tasks. Student engagement is an important concern given the well-documented relationship between class engagement rates and subsequent student learning and achievement. Instructions for taking periodic engagement scans during the class to estimate student engagement rates are included in this component.

The third dimension, Learning Equity, contains indicators of a psychologically supportive classroom climate built upon equity for all students and positive interpersonal relationships.

The fourth dimension is termed Effective Teaching. This is the most lengthy dimension composed of 20 indicators divided into five components. Clarity of Presentation, Use of a Variety of Teaching Methods and Learning Tasks, Use of Teaching Aids and Learning

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Materials, Enthusiasm, and Feedback. Whereas the quality of teaching methods, learning tasks, teaching aids and learning materials were of concern in the written plan, the focus in this dimension is on the effective use of these components in engaging students in various learning tasks. The indicators in this dimension reflect an emphasis on the logical organization of content, the use of appropriate teaching methods and learning tasks, the use of aids and materials to enhance learning, enthusiasm for teaching, learning, and the subject, and informal assessment and feedback about learning. There is concern throughout this dimension with accommodating the range of individual differences in needs and abilities of students, maintaining clear communication and explanations of content and learning tasks, and actively involving all students in learning.

The last section of the handbook includes information related to observing classes, taking notes, and conference skills. The supervisor who observes classes using the indicators in this handbook will leave the classroom with a great deal of information which can be used in working with teachers to emphasize strengths and improve teaching and learning for students. This last section provides techniques for the supervisor for using this information in working with teachers.

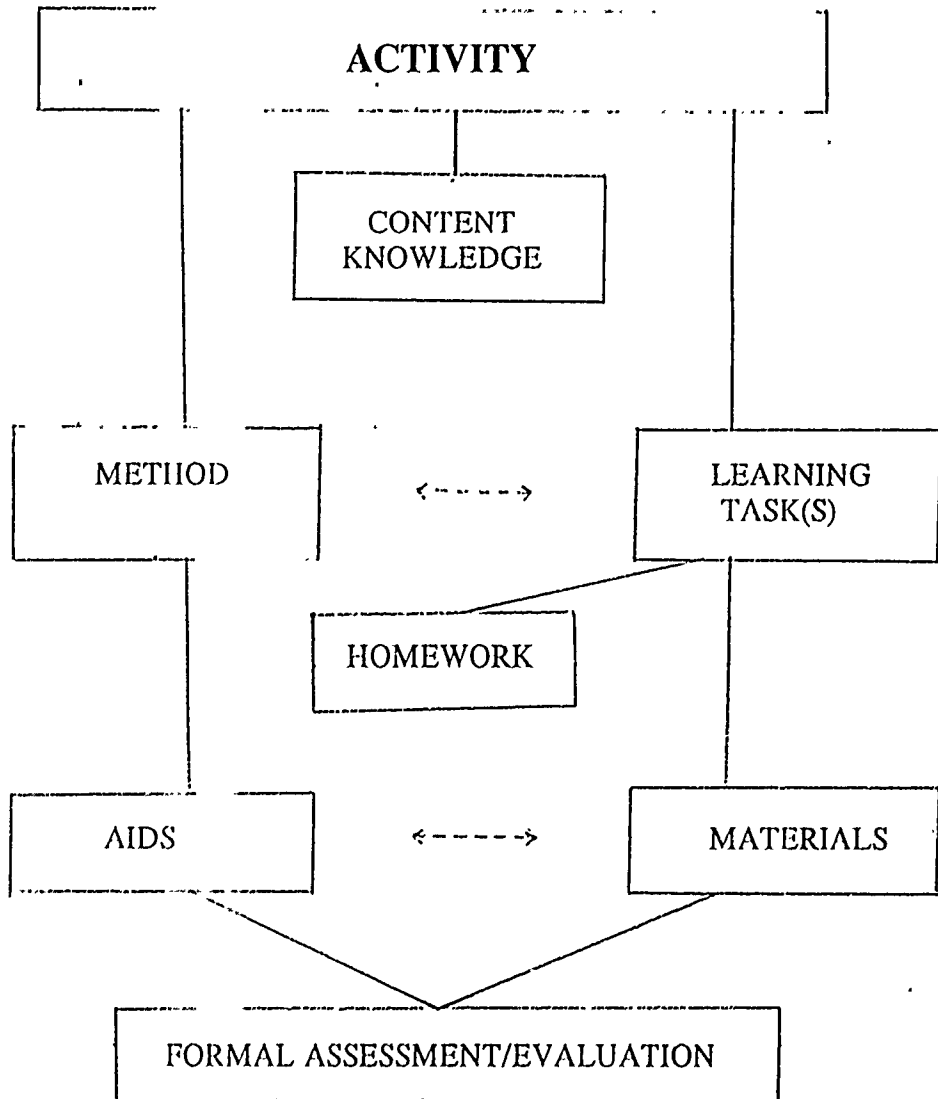
SECTION I: PREPARATION AND PLANNING

Thorough and thoughtful planning is an important component of effective teaching and learning. The written lesson plan should include a statement of the learning objectives, the teaching methods and learning tasks to be employed, the selection and use of aids and materials, and the inclusion of home learning as a logical extension of learning in school. Evaluation of student performance is planned and directly linked to the objectives. Emphasis in this section is on the quality of objectives, teaching methods, learning tasks, teaching aids, learning materials, and evaluation procedures in the written plan. The use of these same components in the classroom will be considered in later sections.

As teachers plan lessons, they consider the body of content knowledge to be learned and design appropriate activities to teach this content. Activities consist of teaching methods, or what the teacher will do, and learning tasks, or what the students will do. The teacher plans for both, for both teacher and students have a role in each activity. The teacher also plans for the use of teaching aids, things planned for use by the teacher to enhance learning, and learning materials, things planned for use by the students to enhance learning. One specialized learning task is homework, or home learning. Finally, the teacher plans evaluation procedures to assess students' learning of the new material.

An overview of the components of a lesson which need to be considered in planning is provided in figure 2.

LESSON PLAN



Indicators of effective planning are as follows:

I.A. Individual Differences

I.A.1 Learning objectives accommodate individual differences among students.

All classes are heterogeneous in terms of student characteristics. Therefore, learning objectives planned should accommodate individual differences among students. A sufficient variety of learning objectives should be included in the lesson or unit plan to accommodate a variety of student learning styles and right/left mode preferences.

I.A.2 Activities accommodate individual differences among students.

Since all classes are heterogeneous in terms of student characteristics, planned activities (teaching methods and learning tasks) should accommodate individual differences among students. A sufficient variety of activities should be included in lesson plans to accommodate students' various learning styles and right/left mode preferences. Lessons should begin with a motivating activity that captures students' attention and promotes subsequent engagement in learning tasks.

I.B. Teaching Aids and Materials

B.1 The lesson plan includes a variety of pertinent aids and materials that accommodate student needs and enhance learning.

Aids are "things" planned for use by the teacher to enhance learning. Materials are the "things" planned by the teacher for use by students to enhance learning.

Teaching methods and learning tasks can be facilitated by the use of aids and materials. The planned use of aids and materials should provide students with practice on learning tasks so that they can achieve the learning objectives.

I.C. Homework (Home learning)

I.C.1 Home learning assignments enhance learning.

Learning is enhanced when teachers plan a sufficient number of home learning assignments that allow them to do one or more of the following:

<u>Practice</u>	Students are provided with opportunities to reinforce newly acquired learning.
-----------------	--

<u>Preparation</u>	Students obtain knowledge necessary to establish prerequisites for the next lesson.
--------------------	---

<u>Extension and Application</u>	Students go beyond learning tasks completed and extend newly acquired knowledge.
----------------------------------	--

Parents should not be expected to teach their children core material which has not been introduced in class.

I.D. Assessments

I.D.1 Summaries or reviews are planned for the lesson.

Periodic summaries and reviews of lesson content are important means of monitoring student learning. Reviewing and summarizing can occur at transitions in the lesson as well as at the end of the lesson. Reviews are also important ways to link prior and future teaching and learning and to provide lesson continuity.

I.D.2 Both formative and summative evaluation are planned.

Formal assessment and evaluation activities can be either "formative" or "summative." Formative assessments (daily quizzes, checking worksheets, etc.) provide the teacher and students with information about how well the student is learning the knowledge and skills intended. Summative assessments are made at the end of a teaching unit.

I.D.3 Tests reflect a variety of formats and items.

A variety of assessment and evaluation formats and items should be used. For example, performance checklists and rating scales, interviews, and paper and pencil tests are different formats. Multiple choice, fill-in-the-blank, and matching are different types of test items. *True/false tests should be avoided.* Variety in formats and items should be sufficient to accommodate student differences and needs and the number and complexity of learning objectives and tasks.

SECTION II: CLASSROOM MANAGEMENT

Effective classroom and behavior management comprise a necessary element of effective teaching performance. Clearly communicated behavioral expectations and fair and consistent consequences facilitate effective and efficient monitoring and maintenance of acceptable student behavior.

II.A Monitoring and Maintaining Student Behavior

II.A.1 Expectations about acceptable student behavior are clear and are consistently maintained.

Making expectations for behavior clear to students is an important element of maintaining acceptable behavior. Consistency in communicating expectations is also a key element of maintaining acceptable behavior. Acceptable student behavior can indicate that behavioral expectations have previously been made clear and are understood by students.

II.A.2 Behavior of the entire class is effectively monitored throughout the lesson.

Effectively monitoring the behavior of students requires periodically surveying the behavior of the entire class throughout the lesson. Moving among students, maintaining eye contact, touching students momentarily, and requesting students to observe each other are examples of monitoring.

Successful monitoring of student behavior can prevent persistent unacceptable behavior. Teacher actions such as verbal and nonverbal cues and feedback, deliberate movement toward students, and other teacher actions may prevent this behavior from occurring.

II.A.3 Students are provided verbal and/or nonverbal feedback about acceptable and unacceptable behavior.

Feedback to students about their behavior should be specific to the behavior and to the student or group of students, or perhaps to the class as a whole. Opportunities should be addressed to provide positive feedback about acceptable student behavior. Positive feedback to students or student groups, when brought to the attention of and observed by members of the class, can be an effective means of communicating behavioral expectations.

II.A.4 Uses techniques to stop unacceptable behavior quickly and in a way that re-engages students in learning

Unacceptable behavior is behavior that violates classroom rules, social norms, or teacher expectations. Examples of unacceptable behavior are interfering in the work of others, answering out of turn, or failure to put away materials as required. When instances of such behavior occur, the effective teacher uses techniques to quickly stop them with reasonable consequences for students. Teachers may use "silent discipline" techniques such as whispering to individual students, pointing a finger, frowning, or other techniques to stop the unacceptable behavior and re-engage the student in learning.

II.B. Class Structure (Task-Oriented)

Time for learning is maximized by a well-organized classroom, by initiating teaching and learning activities promptly, by implementing transitions smoothly and without delay, and by avoiding undesirable digressions from topics or learning activities.

II.B.1 Learning activities begin promptly.

At the beginning of class, teaching and learning activities should begin on time with little time spent on organizational activities such as roll taking. The efficiency with which organizational activities are handled promotes a business-like atmosphere.

II.B.2 There are no unnecessary delays during the lesson.

Unnecessary delays in teaching and learning activities can be avoided by the efficient management of organizational activities, avoiding undesirable digressions, and the efficient handling of interruptions and transitions. Students or student groups who finish tasks early need supplemental activities to maximize their use of class time.

II.B.3 Routine tasks are dealt with in an efficient manner.

The teacher and students have important roles in carrying out routine tasks and procedural matters, such as distributing and collecting learning materials. In carrying out routines, efficient routines need to be established and used so that class time is preserved for teaching and learning activities.

II. C. Student Engagement

Student engagement rates can be calculated to provide important information to teachers about the effectiveness of teaching and learning activities observed. Engagement refers to student overt and/or covert involvement in objectives-related learning activities. Student engagement has been identified in numerous research studies as being positively related to student achievement. Student engagement rates can be estimated for the entire class through systematic observation of task-related behavior during teaching and learning activities as these occur throughout the lesson.

It is desirable to maintain an engagement rate that is as high as possible. A reasonable "target" in typical teaching and learning contexts is 90% or greater. It should be recognized that the engagement rate for a class might be quite high even though one or more students are persistently off-task.

II. C. 1 High levels of student engagement in learning tasks are evident throughout the lesson.

Student engagement rates can be estimated by observing students during classroom activities and making a decision as to whether they are engaged (?) or not engaged (?). Rates of student engagement can be obtained by periodically scanning the entire class at prespecified time intervals throughout the period of the lesson. In making scans of the entire class as a group, the number of students in the class who are not engaged will typically be recorded for each scan. Scans should be made during teaching and learning activities, transitions and classroom routines. If possible, all students should be included in each classroom scan. Scans should be made "by the clock" and on a fixed time interval schedule. To obtain a stable index of classroom engagement, a total of ten scans is suggested for each lesson.

Typically, scans should be taken in 3-to 5-minute intervals and the number of students who are not engaged is recorded for each scan.


Relatively longer intervals might be used with lengthy lessons (e.g., 60-minute lessons) and relatively shorter intervals might be used with shorter lessons (e.g., 30-minute lessons). The fixed interval established for scans may have to be adjusted somewhat to complete the cycle of ten scans because of delays that have nothing to do with teaching and learning (e.g., organizational activities, unexpected interruptions and so on.)

General procedures for estimating the student engagement rate of a class are as follows:

- (a) Before a scan, ask yourself: "What does the teacher at this moment in time expect students to be doing and/or learning?"
- (b) Briefly and systematically, scan all students in the class as a group and record the number of students who are not engaged. Students are not engaged if they are doing something other than what the teacher expects at the time of the scan or if they are waiting for others to finish and are not engaged in an overt or covert learning activity.
- (c) Repeat the scanning and recording procedure at each of the predetermined time intervals until the end of the lesson. *A minimum of ten scans is suggested.*
- (d) For each scan, record the total number of students who were judged as not engaged (off task).
- (e) Calculate the percentage of students off task by dividing the total number of students off task by the total number of students X the number of scans.
- (f) Subtract the percentage of students off task from 100% to find the percentage of students engaged.

While the overall engagement rate is of interest and may be quite high, the variation in engagement rates from one scan to the next is of considerable importance in diagnosing changes in effective teaching and learning during a lesson.

TIPS FOR ESTIMATING STUDENT ENGAGEMENT RATES

1. Sit in a location that maximizes observation of students
 2. Establish schedule of scans
(X minutes class length / X number of scans)
 3. Allow brief time period before beginning scans
(Let the class "settle in")
 4. Note the learning task expectations for students before a scan
(allowable range of student behaviors)
 5. Periodically scan entire class by the clock
 6. Record # of students "off" task
 7. Repeat scanning at fixed intervals
 8. Calculate the percentage of students off task:
$$\frac{\text{Sum total \# of students "off" task}}{\text{Total \# Students X Total \# Scans}}$$
 9. Subtract the percentage of students off task from 100% to find the percentage of students engaged.
- 

An example of computing the overall engagement rate for a class of twenty is provided below

<u>Scan Number</u>	<u>Number of Students "Not Engaged"</u>
1	4
2	0
3	6
4	6
5	2
6	4
7	0
8	0
9	6
10	0

Percentage of students not engaged =

Sum total # of students off-task =
Total # students X total # scans

$$\frac{28}{20 \times 10} = \frac{28}{200} = 14\% \text{ Off task}$$

$$100\% - 14\% = 86\% \text{ engaged}$$

SECTION III: LEARNING EQUITY

Providing an environment conducive to learning is an important dimension of effective teaching. In a supportive learning environment, students are treated fairly and with courtesy and respect and enjoy a relaxed and accepting atmosphere.

III.A. Equity for All Students

III.A.1 Is fair and impartial in interactions with students

Effective teaching and learning occur within an equitable learning environment. A teacher should remain impartial in implementing learning activities, providing ample opportunities for all students to participate. For example, the teacher should not show favoritism in calling on students, providing time for students to answer questions, or in reprimanding students.

III.A.2 Comments, questions, examples, demonstrations, and/or other contributions are sought from students throughout the lesson.

Actively soliciting all students' involvement in learning activities sends a steady and consistent message that all students are important participants in the classroom learning environment. This is important in maintaining a high level of student engagement in learning activities.

III.B. Interpersonal Relationships

III.B.1 Considers, recognizes and/or comments on students' contributions

Recognizing students' contributions sends a steady, positive message that students are an important part of the total teaching and learning environment.

In responding to students' questions, teachers should attempt to fully address students' concerns without either insufficient or excessive elaboration. Insufficient teacher responses can result in confusion. On the other hand, excessive elaboration can result in boredom.

III.B.2 Shows patience, empathy, or understanding for students who respond poorly or who have difficulty

Not all students are equally successful in completing learning tasks. Students who respond poorly or who have difficulty with assigned tasks should be actively encouraged by the teacher. A teacher should probe for areas of misunderstanding, emphasize partial correctness of responses, and revisit students to check their understanding without overemphasizing errors.

Students who respond incorrectly should never be berated by the teacher.

SECTION IV: EFFECTIVE TEACHING

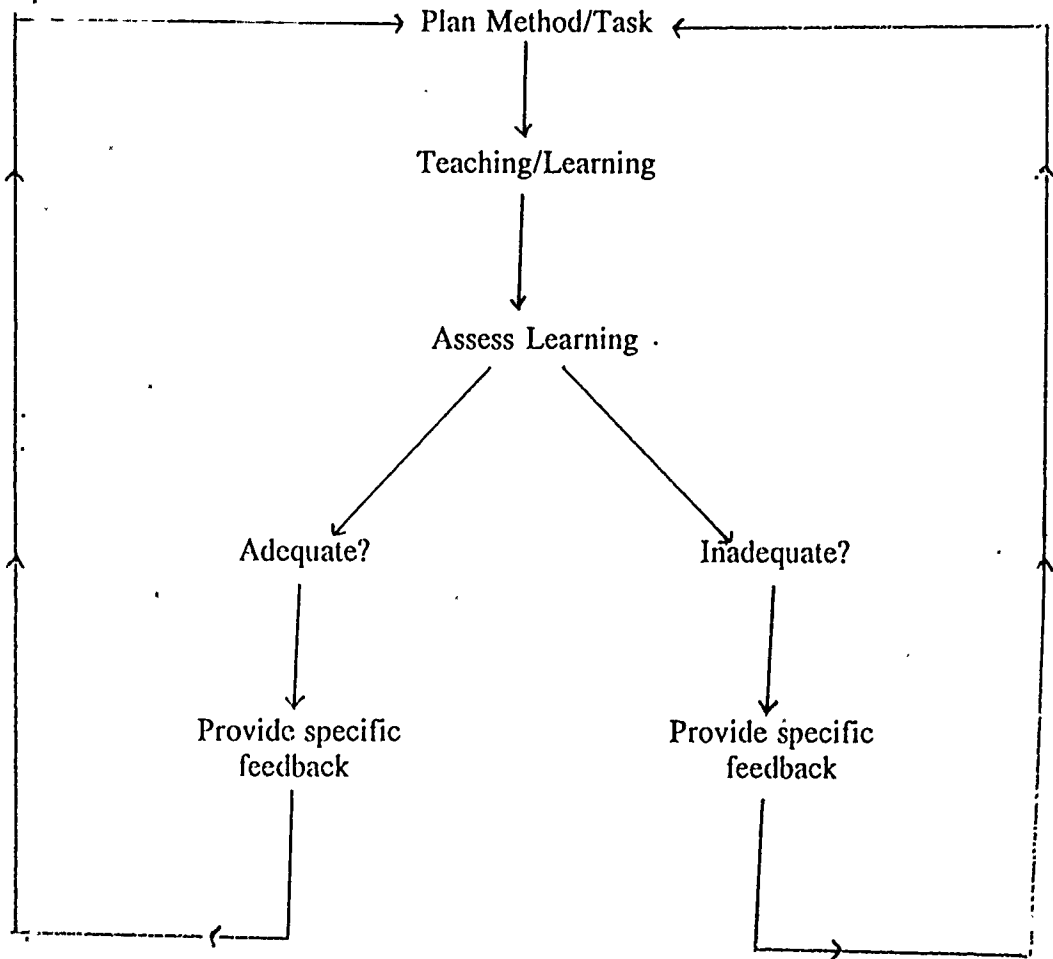
Characteristics of effective teachers have been identified based on research. In these studies "effective" teachers were those whose students scored well in the basic skill areas of reading and mathematics. Characteristics associated with effective teachers are as follows: clarity of presentation, use of a variety of teaching methods and learning tasks, use of teaching aids and learning materials, enthusiasm, and feedback about learning. Additional characteristics of effective teachers are included in other sections of the handbook: feedback about student behavior, class structure (task orientation), and student engagement in learning tasks (II, Classroom Management) and student opportunity to learn (III, Learning Equity).

The quality of teaching methods, learning tasks, teaching aids, and learning materials was considered in the written plan in Section I. During the class observation, the supervisor will consider the use of the methods, tasks, aids, and materials and their effectiveness in maintaining student engagement and in promoting student achievement.

As teachers move from the written plan for a lesson to implementation, they need to continually assess student learning through observation, questioning, demonstrations by students, etc. By monitoring student learning in this way, teachers can assess the adequacy of student learning and provide specific feedback to students. If learning is inadequate, reteaching using a different teaching method and learning task may be required. If learning is adequate, the teacher proceeds to the next activity. A graphic representation of the cycle of learning is included on the following page.

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Teaching Method/Learning Task



IV.A. Clarity of Presentation

Learning is enhanced when information presented by the teacher is structured in a logical manner and students know why they are learning the material. Clear directions and explanations, with relevant examples and periodic reviews, help students to learn. Effective oral communication is also critical to students' understanding.

IV.A.1 Content knowledge is arranged in an order conducive to learning.

Content knowledge should be structured in a logical manner to enhance learning. *Logical structuring of content enhances clarity.* Students can become confused when content/tasks are not presented in a logical sequence or if "gaps" in content presented are evident.

IV.A.2 The purpose of topics and learning activities are communicated to students.

Teachers communicate the purpose of learning activities to students when they explain the rationale for what is to be learned. For example, the teacher may emphasize the relevance of learning activities to real life or link new ideas and concepts to previous and future learning, or the teacher may emphasize that today's activities are an important prerequisite for tomorrow's learning activities.

IV.A.3 Directions and explanations related to lesson content and/or learning tasks are effective.

Explanations and directions for lesson content and learning tasks should always be understandable. Understanding what is to be learned, what to do, and how to do it are important elements of student learning. *Explanations and directions occur throughout a lesson as content and learning tasks change.* Explanations have been effective if there is little student confusion. Confusion can be evidenced by bemused looks, repetitive questions, continual re-explaining, or students' failure to perform steps in learning tasks adequately.

If home learning is assigned during the lesson, the teacher should prepare students for the task. Simply telling students what the assignment is to be is not sufficient.

IV.A.4 Summarizes or reviews during the lesson

Periodic reviews during the lesson are important ways to link prior and future teaching and learning activities and to provide lesson continuity.

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IV.A.5 Oral and written language used in lesson presentation is accurate and easy to understand.

Effective and appropriate oral and written communication include a variety of elements. Clear articulation should make speech understandable. Sentence structure and grammar should be accurate and should facilitate student comprehension. Writing on chalkboard and worksheets should be visible and easily read.

IV.B. Use of a Variety of Teaching Methods and Learning Tasks

Teaching methods are the procedures and techniques used by the teacher to enhance learning. A learning task is the objectives-related activity planned for students to do. To enhance learning, teachers use methods that facilitate the achievement of planned objectives, encourage student interest and involvement, and accommodate different student needs. Flexibility in the use of teaching methods and learning tasks, as well as the use of a variety of student outcomes assessments (tests) are important in meeting students' needs.

IV.B.1 Two or more methods are used that enhance student interest and actively involve students in learning tasks.

Students vary in ability, learning styles, right/left brain preferences, and needs. Effective teachers vary methods to accommodate student differences. *More than one method should be used to enhance student learning.* Methods used may vary from question/answer and discussion to small group problem solving or group projects.

To enhance student learning, all methods used by the teacher should be implemented in ways that stimulate learner interest and active involvement in the task.

Active involvement refers to more than just passive listening. Students who are actively involved are not disinterested or bored.

IV.B.2 Students are given opportunities to learn at more than one cognitive and/or performance level.

Teaching and learning activities emphasize the stimulation of thought and the acquisition of skills or information. Cognitive levels extend from simple, factual information to more complex levels, such as concept learning, application, problem solving, and so on. Performance levels can also vary from relatively simple tasks to more complex tasks.

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IV.C. Use of Teaching Aids and Learning Materials

Aids are "things" used by the teacher to enhance learning, and materials are "things" used by students to enhance learning. The use of aids and materials should enhance mastery of lesson objectives, accommodate student needs, should be used in a timely fashion, and should stimulate high levels of student interest and involvement.

IV.C.1 Teaching aids are used properly and accommodate the range of student needs and abilities.

Proper use of teaching aids implies that standard operating procedures are followed in a manner that enhances learning. Teaching aids (chalkboard, charts, pictures, etc., as available) should match the range of learning styles, and their use should accommodate students' needs and abilities.

IV.C.2 Learning materials are used properly and accommodate the range of student needs and abilities.

Proper use of materials implies that directions and procedures are followed by students to enhance learning. Learning materials (textbooks, manipulatives, etc., as available) should match the range of students' learning styles, and their use should accommodate students' needs and abilities.

IV.D. Enthusiasm

The teacher models enthusiasm and interest in learning through verbal and nonverbal behaviors and encourages active involvement. Students' active engagement in learning tasks, a strong correlate of student achievement, is maximized through stimulus variation.

IV.D.1 Enthusiasm for teaching, learning, and the subject being taught is communicated to students.

Enthusiasm for teaching is communicated to students through the use of verbal and nonverbal behaviors such as changes in voice inflections, positive gestures, movement about the classroom and facial expressions of interest and excitement about teaching, learning, and the subject taught.

Enthusiasm for student learning is conveyed by the teacher's interest in student mastery of concepts being taught. Communicating interest in and excitement about students' learning, participation and contributions are examples of enthusiasm for learning. Enthusiasm for learning motivates students to participate in learning tasks.

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Enthusiasm for content might be displayed by the teacher's interest in the subject matter itself.

- IV.D.2 The teacher provides frequent changes in stimuli throughout the lesson to ensure learner attention and on-task behavior.

Stimulus variation is a key element in maintaining student attention and involvement in learning tasks. Task-related behavior can be promoted through a variety of means such as varying voice, movement, focus of attention, and changing group size or tasks.

- IV.D.3 Activities are initiated with motivating introductions.

A motivating introduction is one that captures and arouses students' curiosity, interest, and subsequent involvement in learning. Techniques used should create a personal interest in the topic by the student and should relate directly to the content/activities of the lesson.

IV.E Feedback

A key element in guiding and enhancing learning is providing specific feedback to students about their performances and mastery of learning objectives. Feedback is more than providing information about correct and incorrect performances. Effective feedback includes suggestions for improving performance and encouragement of subsequent effort. During the process of learning, effective feedback helps shape students' learning. Feedback should (1) be specific to the individual student or group of students (2) be specific to the present learning task (3) provide students with information as to whether or not the response is adequate or inadequate (4) broaden understanding of content knowledge (5) be reasonably balanced between adequate and inadequate responses. In order to provide feedback, teachers must monitor student work and informally assess their understandings.

This section focuses on feedback about learning. Feedback about behavior is addressed in section II.

- IV.E.1 Student responses are solicited to assess student learning during the lesson.

Before feedback can be given, teachers must monitor and assess. Teachers can informally assess students' learning by deliberately seeking information from students as to whether or not they are learning. Comments, questions, answers and demonstrations are sought from students to assess their learning as the lesson proceeds.

IV.E.2 Provides specific feedback to students about responses which are adequate and inadequate.

As learning proceeds, students should be provided with feedback about adequate and inadequate responses. Simply providing students feedback about "right" and "wrong" responses is not sufficient to adequately enhance learning.

IV.E.3 Suggestions for improving performance are provided to students as needed.

As student work is monitored and assessed and inadequate performances are identified, suggestions for improving performance should be provided by the teacher. Suggestions for improvement should be specific to the student (or group of students) and the learning task and should be communicated in a way that encourages continued effort.

IV.E.4 Revisits students who have responded inadequately.

Students who respond inadequately and who are provided corrective feedback should be periodically revisited by the teacher to determine whether or not they understand.

SECTION V: SUPERVISORY TECHNIQUES

A. Observing Classes

When observing classes, supervisors need to take careful notes of classroom events. While traditional classroom observation techniques focus on the teacher, it is also important to note student engagement, behavior, responses, contributions, questions, and responsibility for learning as well. One method is to divide pages of paper into two columns, one labeled "teacher" and one labeled "students." As the lesson proceeds, teacher behaviors, questions, explanations, etc. are noted in abbreviated form in one column, while student behaviors, responses, contributions, etc. are noted in the other column.

During the class observation, the supervisor should only collect information. After the observation, the supervisor reflects on the lesson and considers each indicator, one at a time, making judgments about the quality of teaching and learning. Then the supervisor completes the Teaching Quality and Student Engagement Observation Form on the following page.

Teaching Quality and Student Engagement Observation Form

Teacher _____ Subject _____

Grade _____ Date _____

I. Preparation and Planning (from written plan)

A. Individual Differences

B. Use of Teaching Aids and Materials

C. Homework (Home learning)

D. Assessments

II. Classroom Management

A. Monitoring and Maintaining Student Behavior

B. Class Structure (Task Orientation)

C. Student Engagement

Off-Task:

% On Task:

III. Learning Equity

A. Equity for All Students

B. Interpersonal Relationships

IV. Effective Teaching

A. Clarity of Presentation

B. Use of Variety of Teaching Methods and Learning Tasks

C. Use of Teaching Aids and Learning Materials

D. Enthusiasm

E. Feedback

B. Conference Skills

1. Rationale/Purpose of Conferences

Conferences between the supervisor and the teacher are a vital and integral part of any good staff development plan.


Conferences are critical elements in helping teachers to enhance their teaching and students' learning. Through conferences one can:

- Build a positive relationship with the teacher.
- Collect data on the lesson that will occur in the class.
- Record the unique situations that a teacher may experience in a particular setting.
- Provide an opportunity for expanded communication that is more direct and open.
- Build a broader information base for assisting the teacher in the teaching and learning process.

It is also possible that if conferences are not handled properly, one can destroy the helping relationship and close off further communication. Effective conferences depend on the skills of the supervisor. The following general guidelines and techniques can give direction and assistance in the development of necessary skills for effective conferences.

A skillfully conducted conference guides the teacher in identifying gaps between intentions and performance. It helps the teacher to decide on more effective ways of enhancing teaching and learning. Also, a successful conference leads the teacher to identify personal strengths and weaknesses, and to develop definite plans for improvement of the teaching and learning process.

Three principles essential to a successful conference are:

- a. Thoughtful preparation makes productive conferences.
 - b. Good human relations are essential to productive conferences.
 - c. Effective conferences end with definite plans for action.
- 

2. Observation/Conference Process

Pre-Observation Conference (held the day before the observation):

Review the lesson plan discussed with the teacher.

Ask open-ended questions to solicit additional information.

Discuss points in need of further clarification. There is no need to discuss every single point, only those for which additional information is desired.

Review the observation process and confirm observation arrangements.

Note any special conditions of the class to be observed.

Examples:

Seating arrangement

Class groups

Scheduled interruptions

Discuss the class routines, expected behaviors, etc.

At the beginning of the class:

Ask the teacher if there are any changes or additional information that will be helpful.

At the end of the class:

Ask open-ended questions to solicit additional information about the observation.

Do not give assessment feedback at this point.

Close with a friendly comment.

Example: "I am glad I had an opportunity to observe in your class."

Preparing for a Successful Conference:

Carefully review the teacher's lesson plan.

Analyze the teacher's strengths and weaknesses. Review the key points which will be discussed during the conference.

Schedule the conference and set a time limit, but be sure the time is sufficient. Consider the teacher's schedule.

Choose an informal, non-threatening setting. AVOID the principal's office.

Be sure the setting is private and free from interruptions.

Be goal-oriented. Remember time can slip away from you.

Post-Observation Conference:

Re-state the reason(s) for the conference.

Seek teacher input; use open-ended questions. Try to get the teacher to analyze the situation and offer suggestions in the course of the discussion.

Allow the teacher an opportunity to explain and/or comment.

Listen attentively to responses and record.

Respond to objections without debate.

Stay on task.

Note mutual agreements.

Be positive.

Make comments specific and directly related to the assessment data. As appropriate, share specific observation data.

Verbally summarize the conference.

State actions to be taken, person(s) responsible and timelines, if applicable.

Closing a Conference:

The conference should close with a summary of what was discussed and agreed upon in the conference.

The conference should result in the teacher feeling that needs have been identified and support offered.

The teacher should leave the conference confident of his/her basic potential as a teacher. Remember: Begin positive and focused.
End positive and focused.

C. Questioning to Facilitate Collaboration

1. Asking questions

Ask questions in a positive and helpful manner that conveys openness, equality and respect.

Be sure body language is congruent with verbal language.

Ask questions that are focused on what you want to know, clear, and short.

Use vocabulary that everyone understands, avoiding educational jargon.

Provide wait time.

Rephrase questions as needed to assist understanding.

Ask only one question at a time.

Ask a variety of questions to add interest and stimulate thinking.

Avoid leading questions or questions that put the teacher on the defensive. (Be cautious with "why" questions.)

2. Recognizing/Dignifying Responses

Consider, recognize, comment on responses/contributions in a way that encourages continued response.

Listen attentively and be sincerely interested. (Move into the teacher's frame of reference to determine his/her view and build from there.)

Avoid interruptions that cut off thinking.

Repeat or paraphrase key elements of the response to acknowledge what was said, clarify meanings, explore further or build upon what was said.

"You mentioned that...."

"You are saying that...."

"Do you suppose...."

"What would happen if...."

"How did you arrive at that...."

Provide positive, specific/feedback

"That is an excellent solution. It...."

"That is an insightful observation. It...."

"That is an imaginative alternative. It...."

Manage incorrect, partially correct, inappropriate or resistance statements in a way that maintains the individual's dignity:

*Probe for areas of misunderstanding

***Seek areas of agreement and build from there-giving additional information, suggesting alternatives, viewing from a different perspective.**

"Many would agree that today's students are difficult to reach." (Area of agreement to be built on.)

"Some teachers I have worked with are finding that _____ helps. Would you be willing to try that?"

"What are some things you have tried to enhance their involvement?"

"When do students appear to be most interested/involved?"

*Be straightforward and honest.

Summarize and review periodically to promote mutual understanding, to clarify, to build consensus.

Serve as catalyst, a giver, a process helper, a resource lender as the situation requires.

3. Encouraging Questions from the Teacher

Actively solicit questions.

"This is new to all of us. Do you have any questions about the terminology, intent?"

92

Be aware of and work to overcome reasons teachers do not ask questions:

- *fear of appearing uninformed
- *fear of usurping the leader's role

Be aware of and work to overcome reasons leaders nonverbally discourage questions:

- *fear of appearing uninformed
- *fear of losing control

Praise and reinforce the teachers for asking questions.

"I am glad you asked so we can all be sure."

"That is a pertinent question."

Answer questions as directly as possible.

Be honest. Do not be afraid to admit when you do not know.

Keep the conference focused by redirecting questions toward the goal.

Developing Open-ended Questions:

The following are sample data-based, open ended, non-evaluative questions:

Positive

"I noticed you (did something during the lesson. Can you tell me why?"

"When you (did something) during the lesson, your students (did something). Does this usually occur?"

"Your lesson seemed to keep student very actively involved. What do you think is the most important/effective way to maintain involvement?"

Negative

"When you placed students in silent reading groups, I observed that many did not stay involved in this activity. Did you notice this? Can you tell me why this might happen? What could you have done to prevent this?"

"You distributed materials for each student so they could (name of task). You did this by moving from one student to another until each student had materials. Can you think of a more time-conserving way that you might distribute materials?"

Sample Questions

What were the expected learner outcomes for the small group activity?

How do you think this contributed to the enhancement of students learning?

I noticed you began the lesson with a cartoon. Can you share with me your thoughts and intent regarding this activity?

During the lesson, students appeared to freely talk among themselves from time to time. What behavioral expectations do you have for students in your class?

There appeared to be a number of students who were minimally involved in the learning activities? Is this typical of these students?

How do you view this type of behavior? What strategies do you find effective in getting students involved in the learning activities?

At one point in the lesson, when discussing "communities" students appeared to be quite confused. How do you account for the students' confusion?

I noticed that during the lesson you asked Sayeed to stop talking. However, I noticed that several other students were talking as well. Can you tell me more about this situation?

Appendix C

Research Instruments:

Stages of Concern Questionnaire

Innovation Configurations Component Checklist

Taking Charge of Change

Concerns Questionnaire

Name _____

In order to identify these data, please give us the last four digits of your Social Security number: _____

The purpose of this questionnaire is to determine what people who are using or thinking about using various programs are concerned about at various times during the innovation adoption process. The items were developed from typical responses of school and college teachers who ranged from no knowledge at all about various programs to many years experience in using them. Therefore, a good part of the items on this questionnaire may appear to be of little relevance or irrelevant to you at this time. For the completely irrelevant items, please circle "0" on the scale. Other items will represent those concerns you do have, in varying degrees of intensity, and should be marked higher on the scale. For example:

This statement is very true of me at this time. 0 1 2 3 4 5 6 7
 This statement is somewhat true of me now 0 1 2 3 4 5 6 7
 This statement is not at all true of me at this time 0 1 2 3 4 5 6 7
 This statement seems irrelevant to me. 0 1 2 3 4 5 6 7

Please respond to the items in terms of your present concerns, or how you feel about your involvement or potential involvement with _____ (Please specify the innovation. We do not hold to any one definition of this program, so please think of it in terms of your own perceptions of what it involves. Remember to respond to each item in terms of your present concerns about your involvement or potential involvement with the above named innovation. Thank you for taking time to complete this task.

	0	1	2	3	4	5	6	7
Irrelevant		Not true of me now		Somewhat true of me now				Very true
1. I am concerned about students' attitudes toward this innovation.	0	1	2	3	4	5	6	7
2. I now know of some other approaches that might work better.	0	1	2	3	4	5	6	7
3. I don't even know what the innovation is.	0	1	2	3	4	5	6	7
4. I am concerned about not having enough time to organize myself each day.	0	1	2	3	4	5	6	7
5. I would like to help other faculty in their use of the innovation.	0	1	2	3	4	5	6	7
6. I have a very limited knowledge about the innovation.	0	1	2	3	4	5	6	7
7. I would like to know the effect of innovation on my professional status.	0	1	2	3	4	5	6	7
8. I am concerned about conflict between my business and my responsibilities.	0	1	2	3	4	5	6	7
9. I am concerned about revising my use of the innovation.	0	1	2	3	4	5	6	7
10. I would like to develop working relationships with both our faculty and outside faculty using this innovation.	0	1	2	3	4	5	6	7
11. I am concerned about how the innovation affects students.	0	1	2	3	4	5	6	7
12. I am not concerned about this innovation.	0	1	2	3	4	5	6	7

From the Teacher's Perspective

- I would like to know who will make the decisions in the new system. 0 1 2 3 4 5 6 7
- I would like to discuss the possibility of using the innovation. 0 1 2 3 4 5 6 7
- I would like to know what resources are available if we decide to adopt this innovation. 0 1 2 3 4 5 6 7
- I am concerned about my ability to manage all the innovation requires. 0 1 2 3 4 5 6 7
- I would like to know how my teaching or administration is supposed to change. 0 1 2 3 4 5 6 7
- I would like to familiarize other departments or persons with the progress of this new approach. 0 1 2 3 4 5 6 7
- I am concerned about evaluating my impact on students. 0 1 2 3 4 5 6 7
- I would like to reverse the innovations instructional approach. 0 1 2 3 4 5 6 7
- I am completely occupied with other things. 0 1 2 3 4 5 6 7
- I would like to modify our use of the innovation based on the experiences of our students. 0 1 2 3 4 5 6 7
- Although I don't know about this innovation, I am concerned about things in the area. 0 1 2 3 4 5 6 7
- I would like to excite my students about their part in this approach. 0 1 2 3 4 5 6 7
- I am concerned about time spent working with nonacademic problems related to this innovation. 0 1 2 3 4 5 6 7
- I would like to know what the use of the innovation will require in the immediate future. 0 1 2 3 4 5 6 7
- I would like to coordinate my effort with others to maximize the innovations effects. 0 1 2 3 4 5 6 7
- I would like to have more information on time and energy commitments required by this innovation. 0 1 2 3 4 5 6 7
- I would like to know what other faculty are doing in this area. 0 1 2 3 4 5 6 7
- At this time, I am not interested in learning about this innovation. 0 1 2 3 4 5 6 7
- I would like to determine how to supplement, enhance, or replace the innovation. 0 1 2 3 4 5 6 7
- I would like to use feedback from students to change the program. 0 1 2 3 4 5 6 7
- I would like to know how my role will change when I am using the innovation. 0 1 2 3 4 5 6 7
- Coordination of tasks and people is taking too much of my time. 0 1 2 3 4 5 6 7
- I would like to know how this innovation is better than what we have now. 0 1 2 3 4 5 6 7

Taking Charge of Change

SoCQ Quick Scoring Device

Date: 9-19-99
 Site: Austin SSN: 0001
 Innovation: Bilingual Education

Five Item Raw Scale Score Total	Percentiles for					
	Stage 0	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
0	10	5	5	2	1	1
1	23	12	12	5	1	2
2	29	16	14	7	1	3
3	37	19	17	9	1	3
4	46	23	21	11	2	4
5	53	27	25	15	3	5
6	60	30	28	18	3	5
7	66	34	31	23	4	7
8	72	37	35	27	5	10
9	77	40	39	30	5	12
10	81	43	41	34	7	14
11	84	45	45	39	8	16
12	86	48	49	43	9	16
13	89	51	52	47	11	22
14	91	54	55	52	13	25
15	93	57	57	56	16	28
16	94	60	59	60	19	31
17	95	63	63	65	21	36
18	96	66	67	69	24	40
19	97	69	70	73	27	44
20	98	72	72	77	30	48
21	98	75	76	80	33	52
22	99	80	78	83	38	55
23	99	84	80	85	43	59
24	99	88	83	88	48	64
25	99	90	85	90	54	68
26	99	91	87	92	59	72
27	99	93	89	94	63	76
28	99	95	91	95	66	80
29	99	96	92	97	71	84
30	99	97	94	97	75	88
31	99	98	95	98	82	93
32	99	99	96	98	86	96
33	99	99	96	99	90	98
34	99	99	97	99	92	99
35	99	99	99	99	96	99

D

From the Teacher's Perspective

	0	1	2	3	4	5	6
3	0	1	7	5	4	1	2
12	1	5	13	4	8	11	9
21	1	5	17	6	5	19	20
23	2	6	28	5	25	6	24
30	1	4	33	1	31	32	1

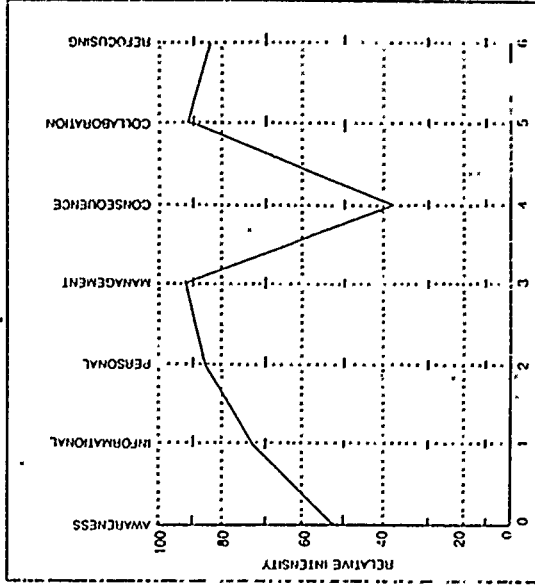
D

	0	1	2	3	4	5	6
5	21	26	22	31	23		

C

	0	1	2	3	4	5	6
53	75	87	92	38	91	94	

E



F

SoC STAGES

Innovation Configurations Component Checklist For Implementation of ECA Instructional Aids and Materials

Component 1: ECA Textbooks

(1)	(2)	(3)	(4)	(5)
Two or more innovative teaching methods used daily (discussion, role playing, projects, etc.)	Two or more innovative teaching methods used weekly	Traditional methods only (Read aloud, recitation)	Not used	Not available

Component 2: ECA Teaching Guides

(1)	(2)	(3)	(4)	(5)
Always used in lesson planning	Usually used in lesson planning	Sometimes used in lesson planning	Not used	Not available

Component 3: ECA Silkscreen Charts

3 A

(1)	(2)	(3)	(4)	(5)
Students use frequently	Only the teacher and selected students use most of the time	Typically, the teacher demonstrates and students watch	Displayed only - Not used	Not available

3 B

(1)	(2)	(3)	(4)	(5)
Daily	3 times a week	Once a week	Not used	Not available

Component 4: ECA Globes

4 A

(1)	(2)	(3)	(4)	(5)
Students use frequently	Only the teacher and selected students use most of the time	Typically, the teacher demonstrates and students watch	Displayed only - Not used	Not available

4 B

(1)	(2)	(3)	(4)	(5)
Daily	3 times a week	Once a week	Not used	Not available

Component 5: ECA Math and Science Aids

5 A

(1)	(2)	(3)	(4)	(5)
Students use frequently	Only the teacher and selected students use most of the time	Typically, the teacher demonstrates and students watch	Displayed only - Not used	Not available

5 B

(1)	(2)	(3)	(4)	(5)
Daily	3 times a week	Once a week	Not used	Not available

Component 6: ECA Individual Chalkboards

6 A

(1)	(2)	(3)	(4)	(5)
Students use frequently	Only the teacher and selected students use most of the time	Typically, the teacher demonstrates and students watch	Displayed only - Not used	Not available

6 B

(1)	(2)	(3)	(4)	(5)
Daily	3 times a week	Once a week	Not used	Not available

Component 7: ECA Maps

7 A

(1)	(2)	(3)	(4)	(5)
Students use frequently	Only the teacher and selected students use most of the time	Typically, the teacher demonstrates and students watch	Displayed only - Not used	Not available

7 B

(1)	(2)	(3)	(4)	(5)
Daily	3 times a week	Once a week	Not used	Not available

Innovation Configurations Interview Questions

At the beginning of the interview, please take a few minutes to try to make the teacher feel comfortable. Explain that you are gathering information about ECA materials and how teachers overall are using them. No names of individual teachers will be used.

The following questions may be used to begin a discussion of each component with the teacher. Follow up questions may be needed to gain additional information.

Do not share the Innovation Configurations Component Checklist with the teacher. After the teacher has answered each question, circle the number in the appropriate column.

Please note any difficulties you encounter in using the instrument in this pilot study. Revisions to the IC Component Checklist will be made based on your input.

1. Do you have the ECA textbooks?
Describe how you teach a typical lesson using the textbook.
2. Do you have the ECA teaching guides?
 - A. How do you use them in planning lessons?
 - B. How often would you estimate that you use the teaching guides?
3. Do you have the ECA silkscreen charts?
 - A. How do you use them?
 - B. How often do you use them?
4. Do you have the ECA globes?
 - A. How do you use them?
 - B. How often do you use them?
5. Do you have the ECA math and science aids?
 - A. How do you use them?
 - B. How often do you use them?
6. Do you have the ECA individual chalkboards?
 - A. How do you use them?
 - B. How often do you use them?
7. Do you have the ECA maps?
 - A. How do you use them?
 - B. How often do you use them?

Innovation Configuration Component Checklist Recording Form

Component 1:	1	2	3	4	5
ECA Textbooks					
Component 2:	1	2	3	4	5
ECA Teaching Guides					
Component 3:	1	2	3	4	5
ECA Silkscreen Charts					
Component 4:	1	2	3	4	5
ECA Globes					
Component 5:	1	2	3	4	5
ECA Math & Science Aids					
Component 6:	1	2	3	4	5
ECA Individual Chalkboards					
Component 7:	1	2	3	4	5
ECA Maps					

**Percentage of Teachers Using Each
Variation of Each Component**

Component 1: ECA Textbooks	1	2	3	4	5
Component 2: ECA Teaching Guides	1	2	3	4	5
Component 3: ECA Silkscreen Charts	1	2	3	4	5
Component 4: ECA Globes	1	2	3	4	5
Component 5: ECA Math & Science Aids	1	2	3	4	5
Component 6: ECA Individual Chalkboards	1.	2	3	4	5
Component 7: ECA Maps	1	2	3	4	5